13 Chicken Coop Plans and Designs

Small and Large Coops
Portable Chicken Coops

By John Davidson

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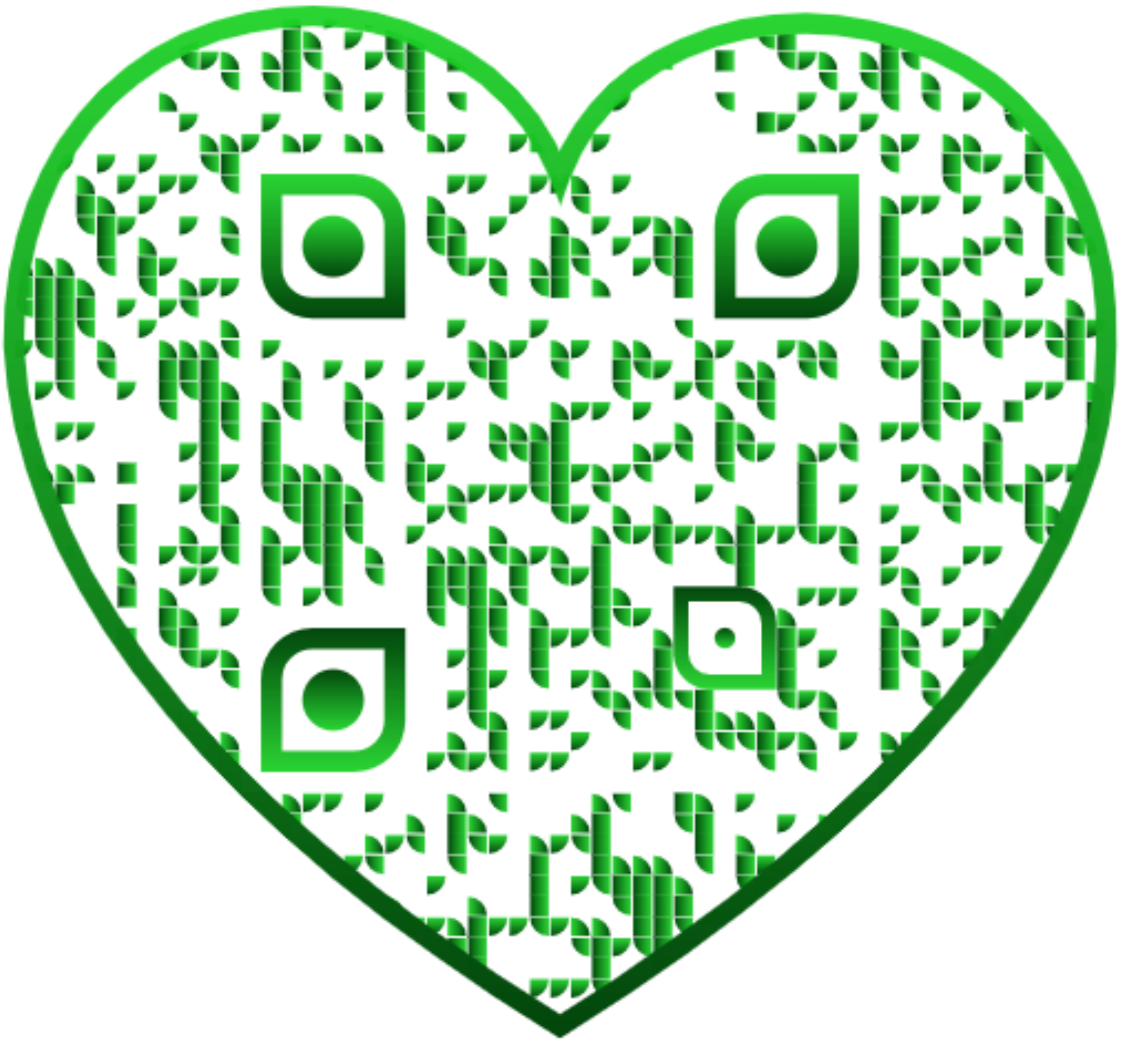

13 Chicken Coop Plans and Designs

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Kindle Edition

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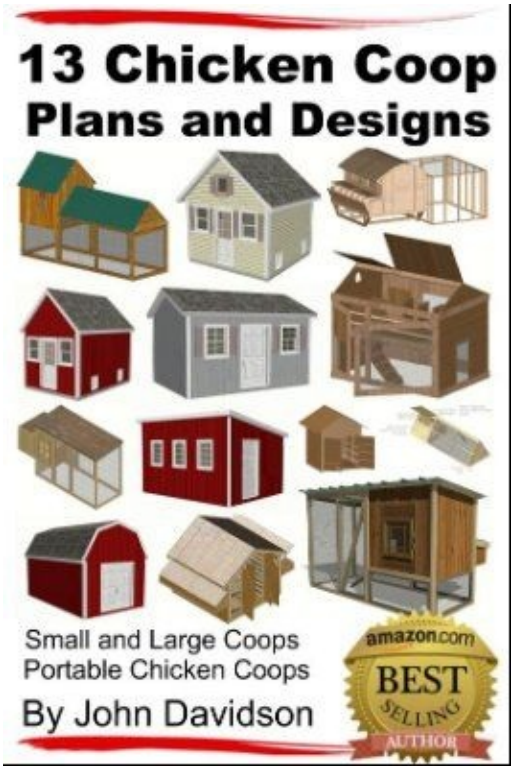
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Building a Portable Chicken Coop Videos

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Portable Chicken Coop Plans

How To Print Plans

Plan Copyright Information

Other Plans Available

About the Author

John Davidson

John has been drawing homes barns and garages since 1984. He has drawn over 500 homes and over 1000 garages and barns. John started a family drafting business called Specialized Design Systems (SDSPlans).

On the website http://housecabin.com there are over 100 full house and cabin plans available for easy download for as low as $1 each. John has been selling affordable digital plans online for over 10 years.

Other plans have also been part of the development of this online business. Over 100 websites market these plans on the Internet. Low cost plans that you can download instantly.

Check out more of the plans at the main company website http://sdsplans.com

Specialized Designs Systems LLC, Mendon, Utah

DISCLAIMER

READ BEFORE YOU BEGIN! THESE PLANS ARE INTENDED AS A GUIDE ONLY! READ THESE INSTRUCTIONS COMPLETELY THROUGH ONCE AND UNDERSTAND WHAT IS REQUIRED.

We will not be held responsible for any accidents or injuries anyone may sustain. Builder assumes all risks associated with construction work!

We assume some builder competency in the use of tools, safety and equipment.

Work safely and wear proper safety equipment such as gloves, ear protection and eye protection.

To the best of my knowledge these plans are drawn to comply with owner's and/ or builder's specifications and any changes made on them after prints are made will be done at the owner's and / or builder's expense and responsibility. The contractor shall verify all dimensions and enclosed drawing. SDSCAD is not liable for errors once construction has begun. While every effort has been made in the preparation of this plan to avoid mistakes, the maker cannot guarantee against human error. The contractor of the job must check all dimensions and other details prior to construction and be solely responsible thereafter. All calculations and member sizing should be verified for your building by a certified building official.

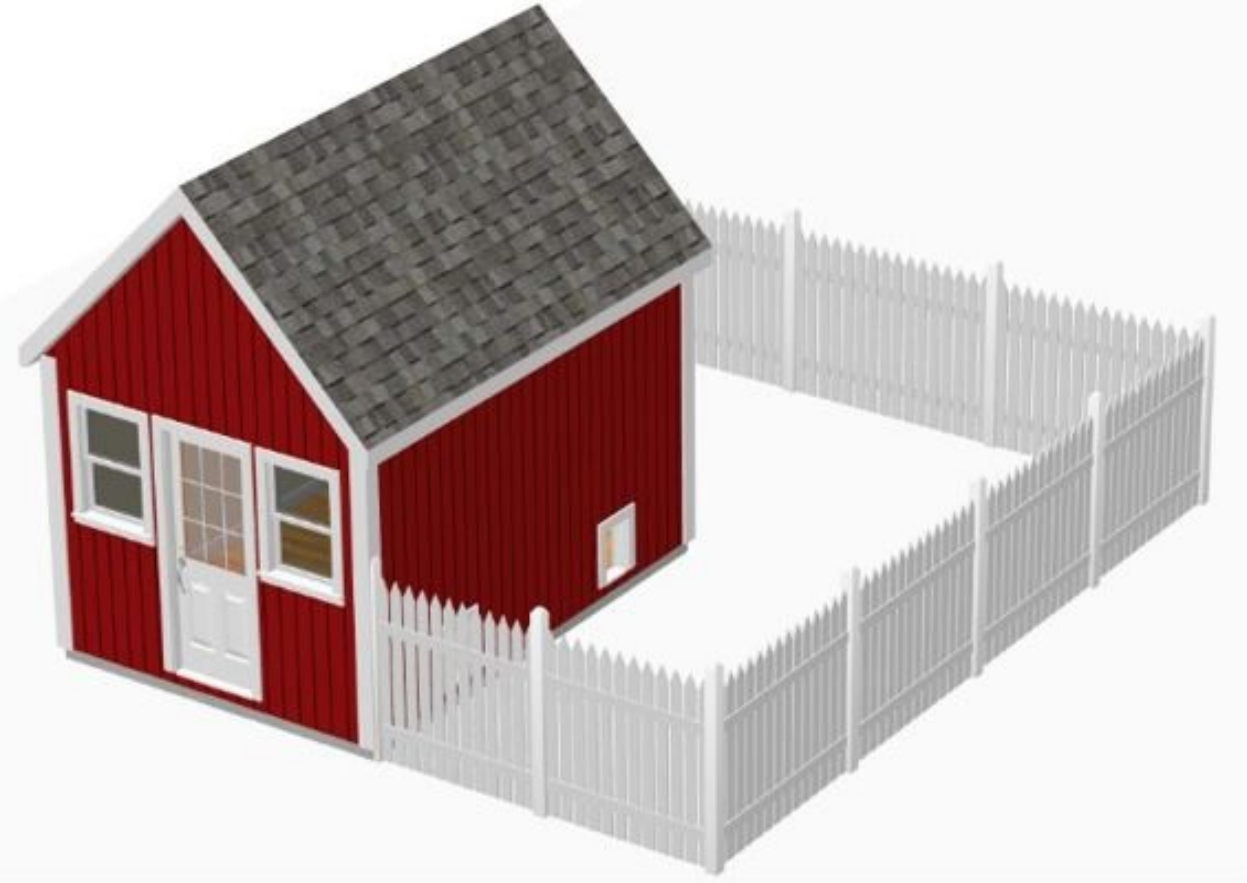
Please Note

Please note, this book is not a step by step book for construction but the actual plans that can be used to apply for permits. Plans in the kindle book are low resolution because of limits to the kindle format but links to download and print high resolution to scale blueprints in PDF format are available in the book. Engineering may be required on plans to be built in different locations.

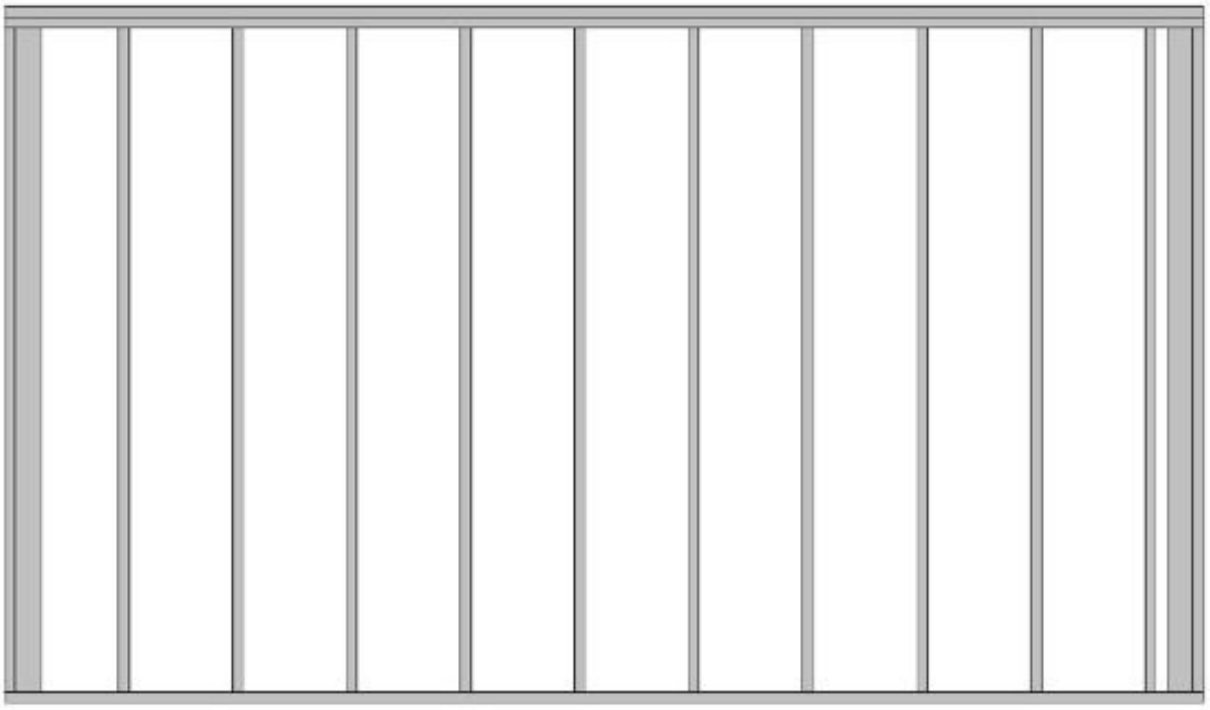
10’ x 14’ Shed Plans

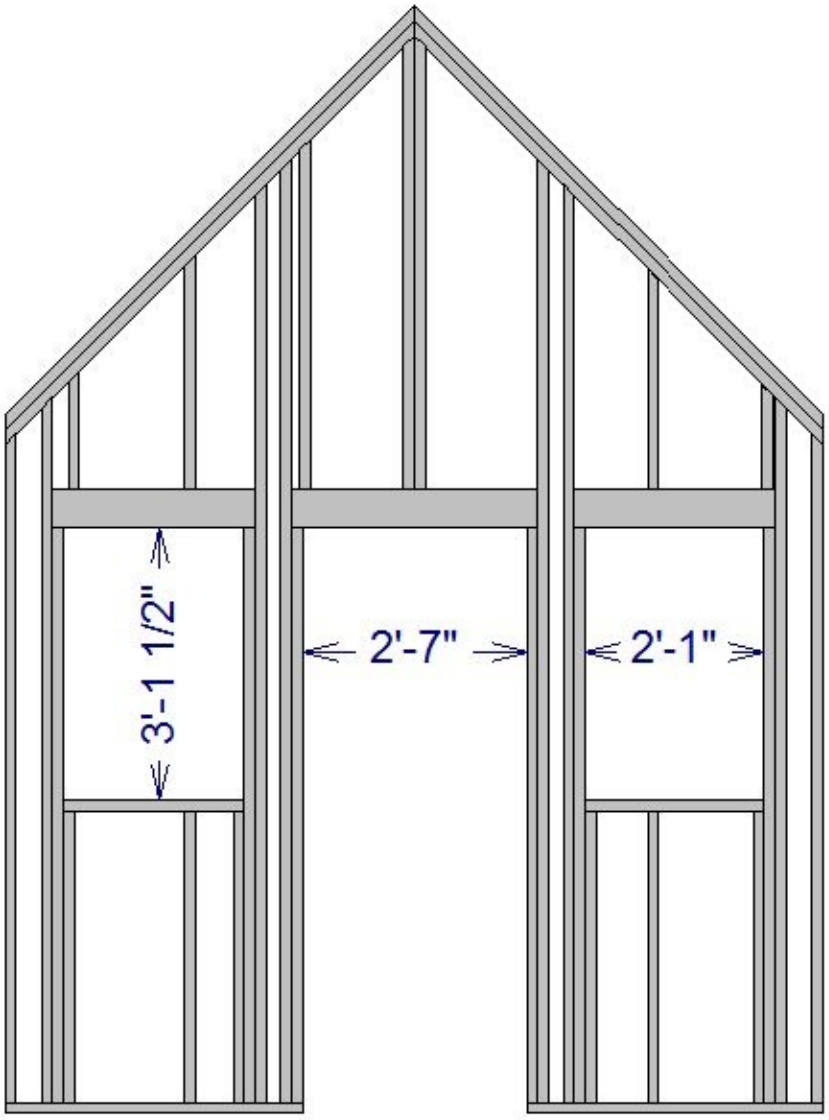
The Design Origination

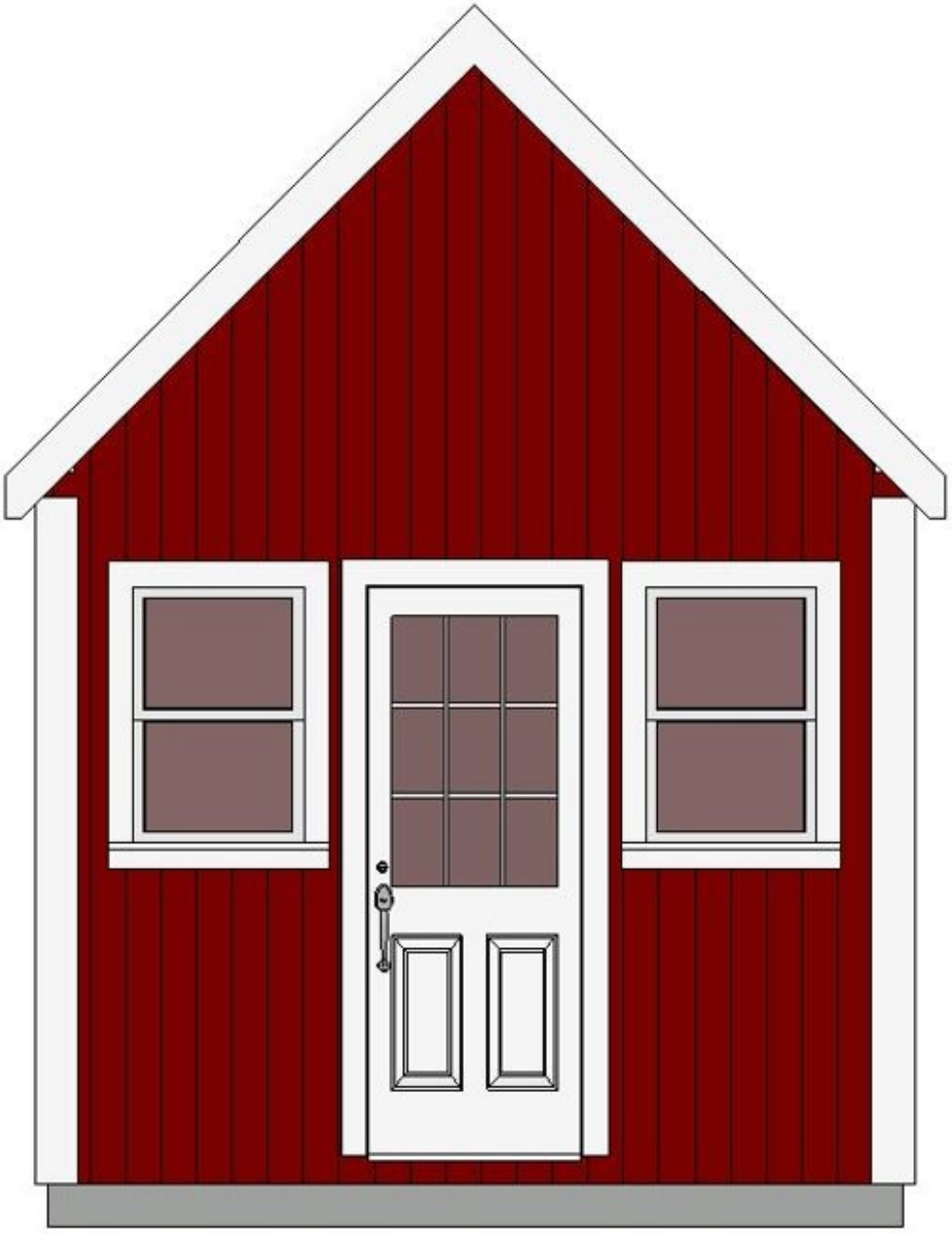
This is a picture of the chicken coop out at my brother in law’s farm that inspired the plans for the 10’ x 14’ that we designed and built. His was a little smaller at 8’ x 12’. We decided on the 10’ x 14’ because we wanted a little more room for chickens and 200 sq ft limit is allowed in our area before permits are required. Check your local building department to find out what is required in your area before starting the process.

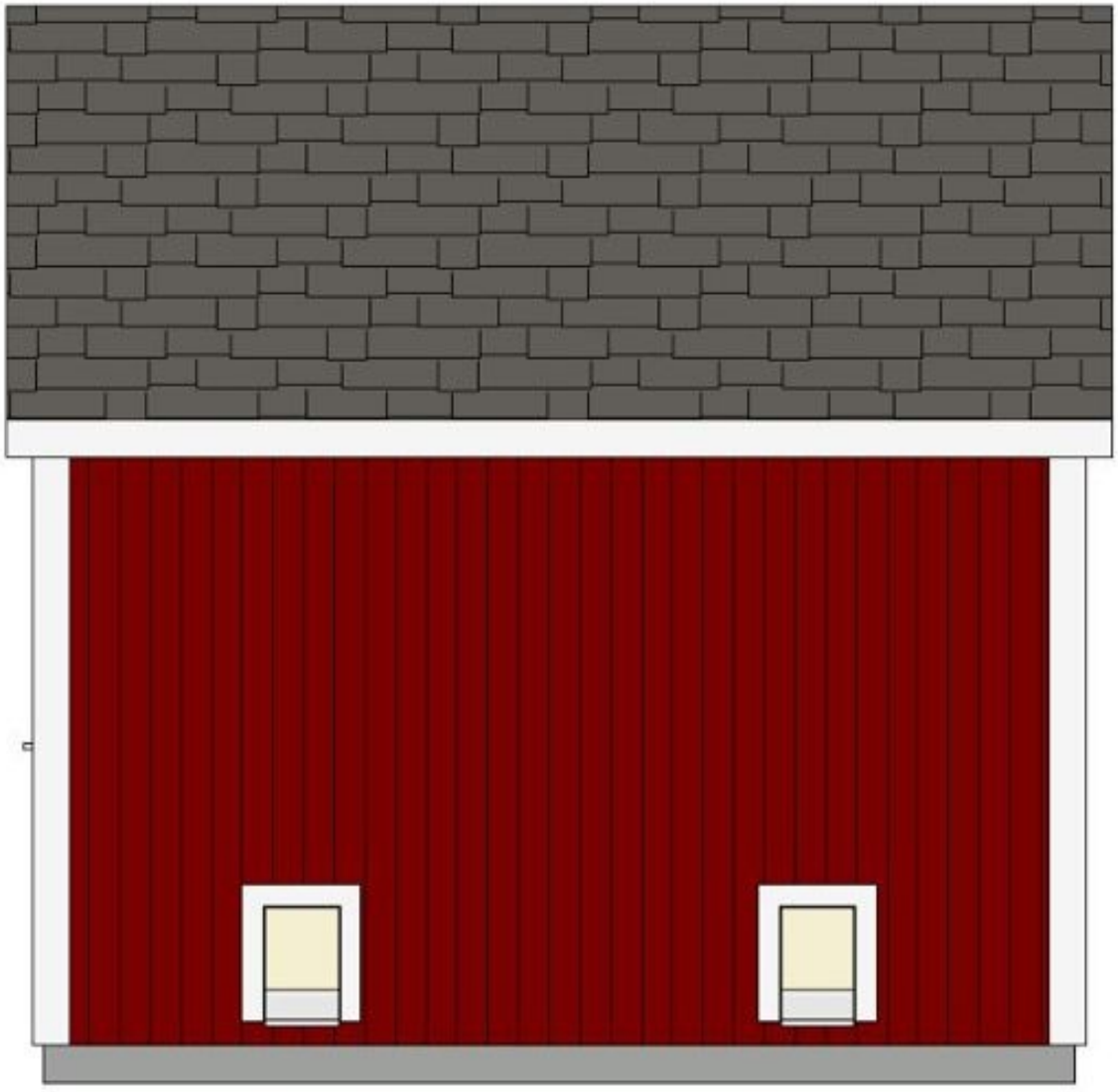


The building can be built on a concrete pad or built on a framed wood floor with skids.

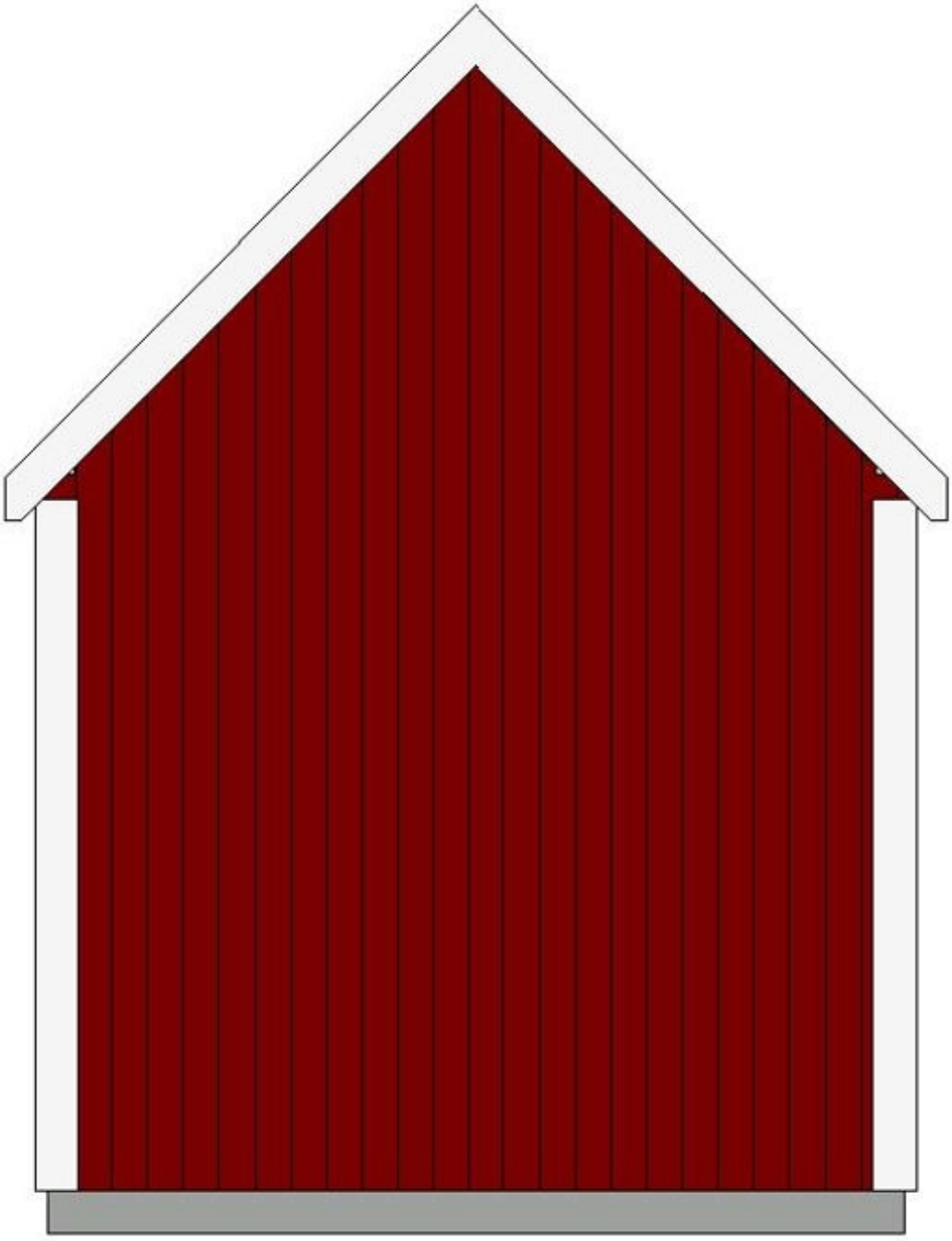


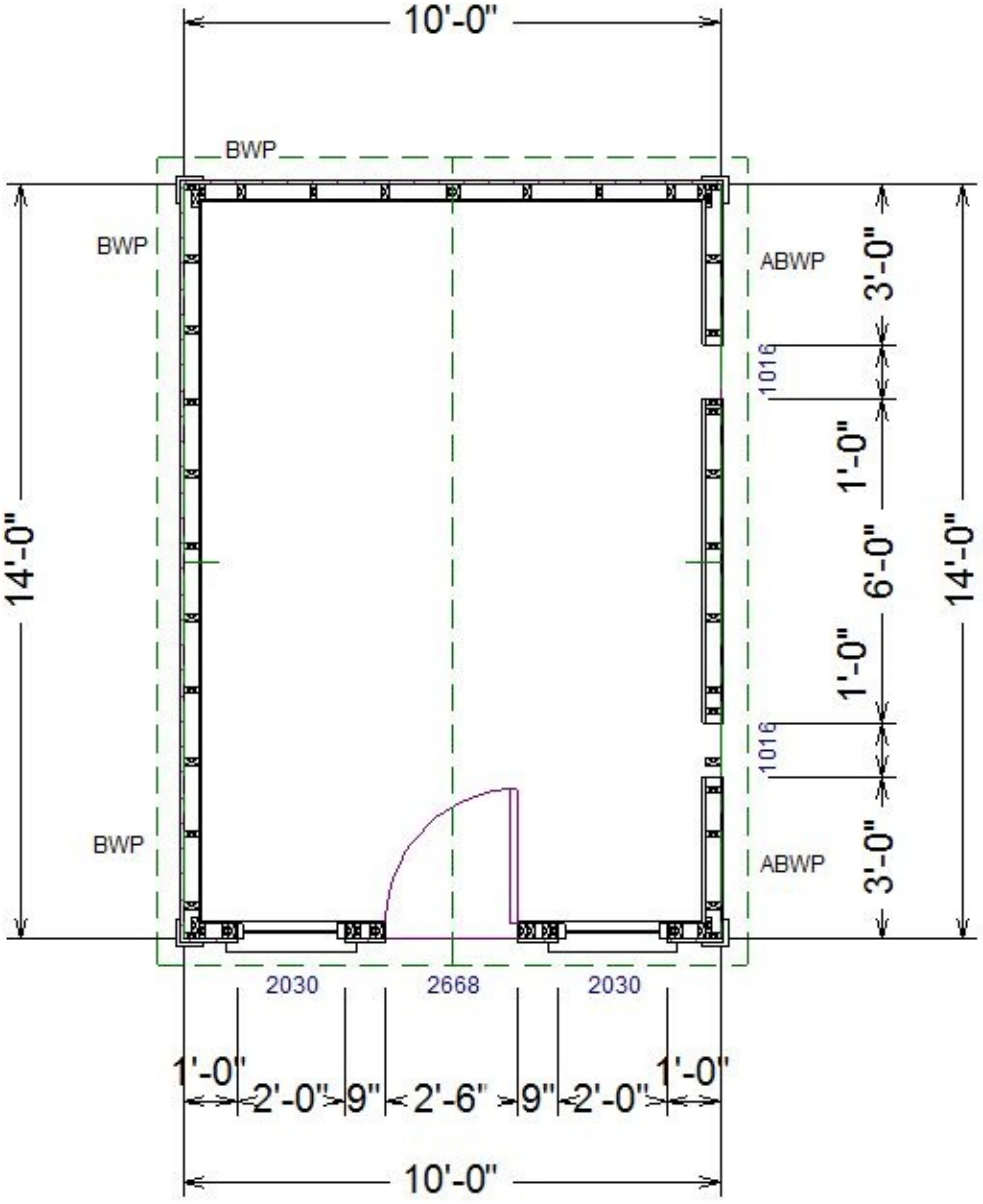

3'-1 1/2"
2'-7"
2'-1"



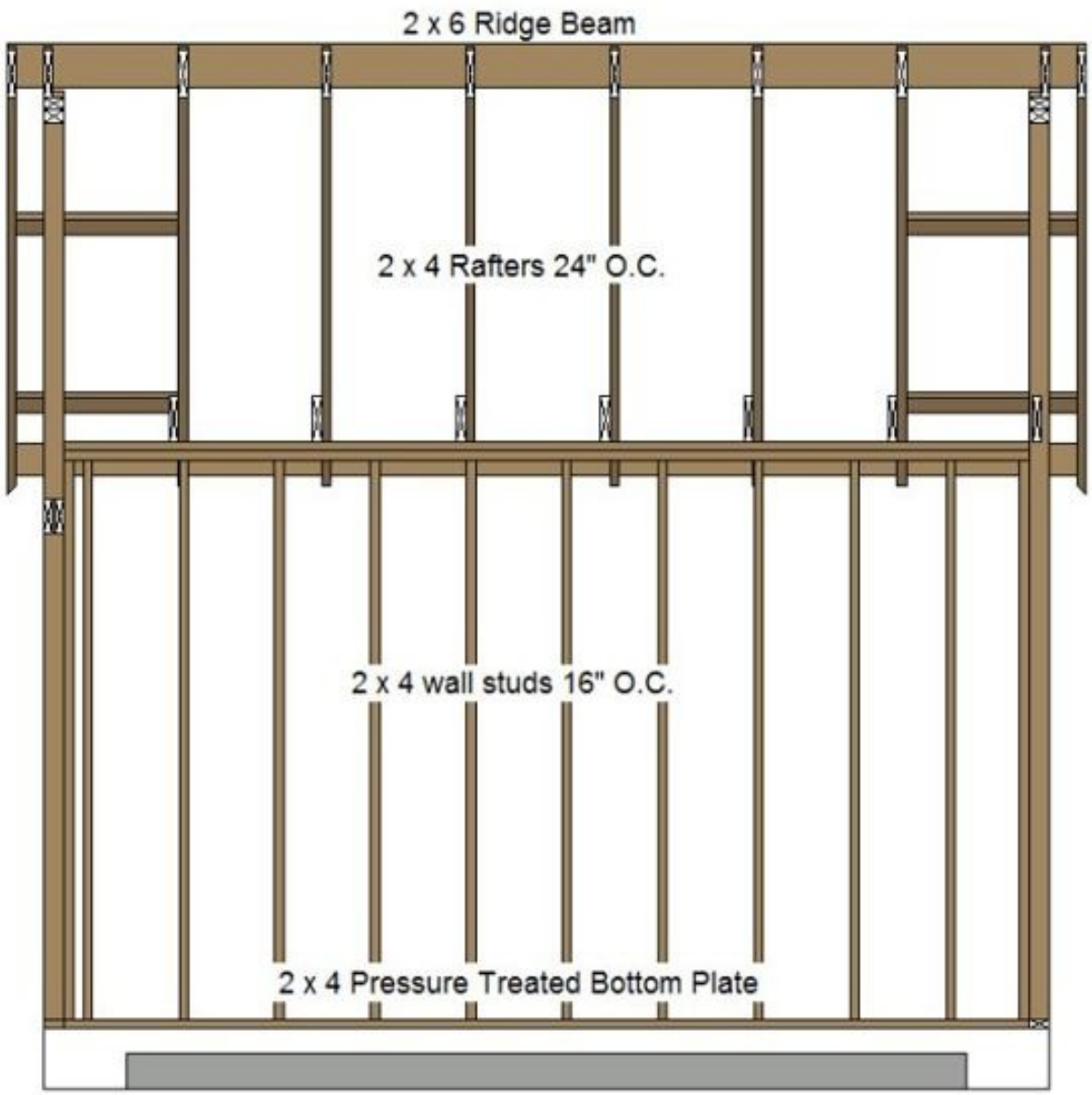


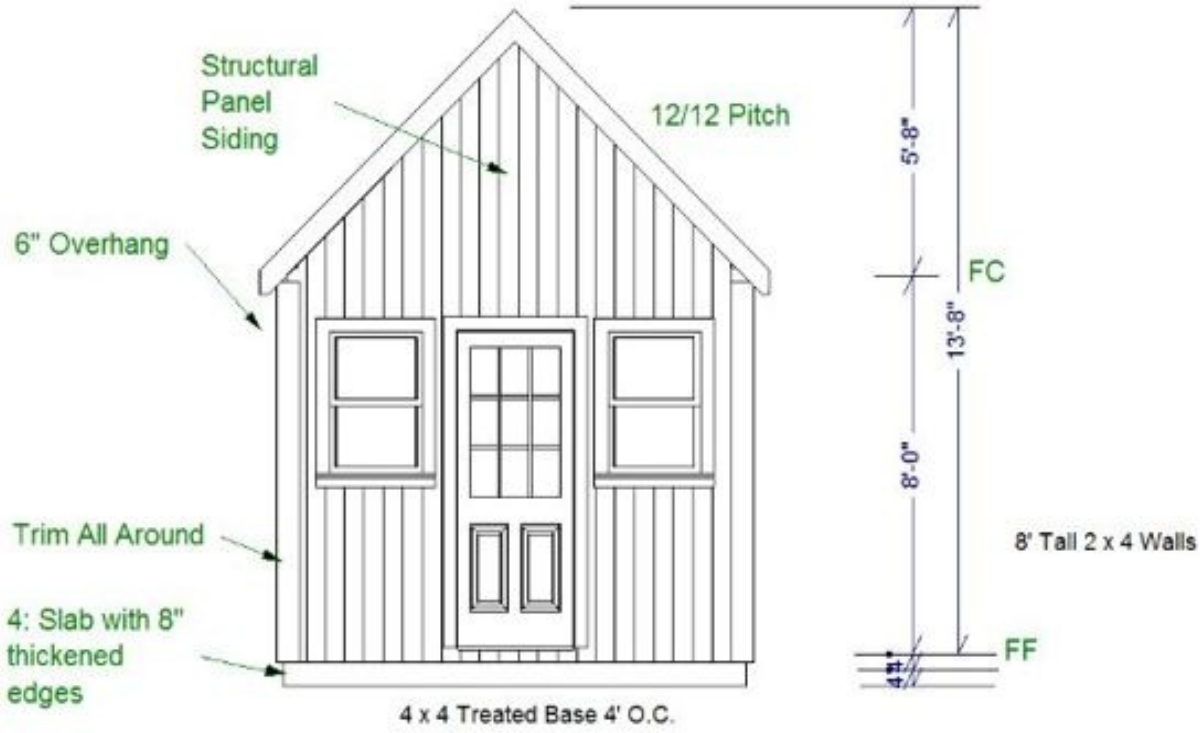
Small doors can be optional if not going to be used as a chicken coop.

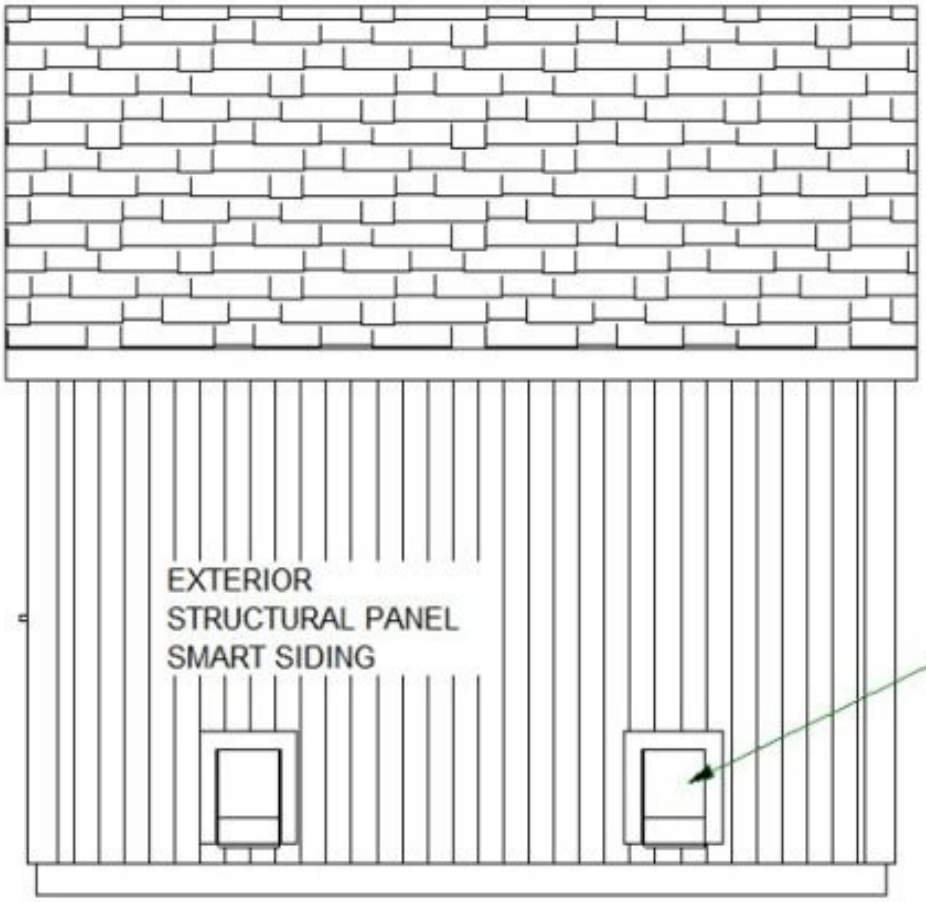



10'-0"
BWP
BWP
ABWP
3'-0"
1016
1'-0"
6'-0"
1'-0"
1016
3'-0"
14'-0"
14'-0"
BWP
ABWP
2030
2668
2030
1'-0"
2'-0"
9"
2'-6"
9"
2'-0"
1'-0"
10'-0"

Studs are 16” O.C. and ceiling joists are 24” O.C.

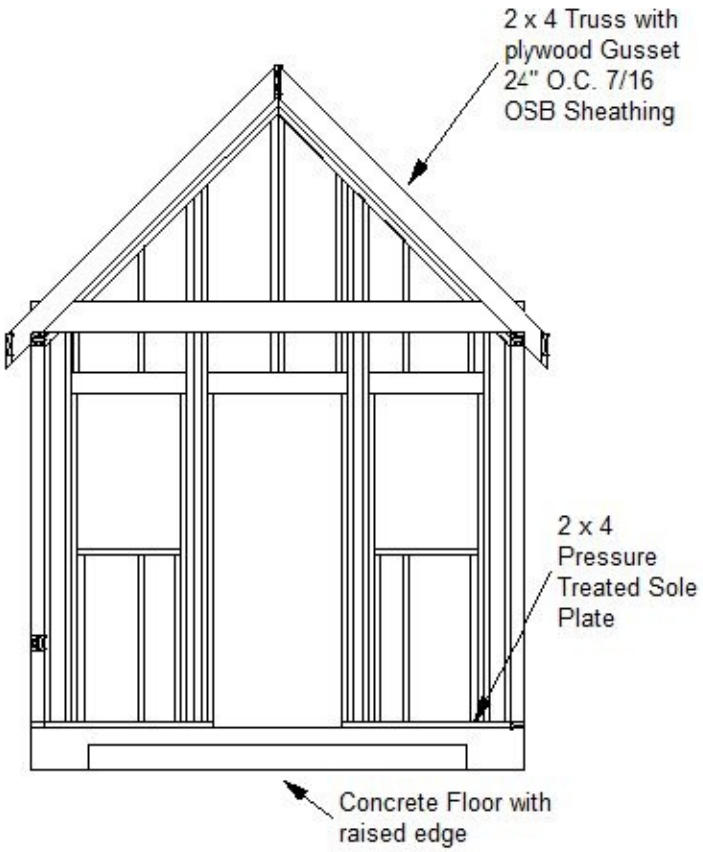

2 x 6 Ridge Beam
2 x 4 Rafters 24" O.C.
2 x 4 wall studs 16" O.C.
2 x 4 Pressure Treated Bottom Plate


Structural
Panel
Siding
12/12 Pitch
6" Overhang
5'-8"
FC
13'-8"
8'-0"
8' Tall 2 x 4 Walls
Trim All Around
4: Slab with 8"
thickened
edges
FF
4"
4 x 4 Treated Base 4' O.C.


EXTERIOR
STRUCTURAL PANEL
SMART SIDING
Optional 12 x
18 Chicken
Doors

General framing: (Douglas Fir)

1. Minimum header sizes shall be according to the following table unless otherwise noted. Header sizes (single story construction)
   2'-0" to 4'-0" Span 2-2x4's
   4' + to 6'-0" Span 2-2x6's
   6' + to 8'-0" Span 2-2x8's
   8' + to 10'-0" Span 2-2x10's
   10' + to 12'-0" Span 2-2x12's or as noted on plan
2. Brace all exterior walls and cross-stud partitions at each end of building and at least every 25' of length by one of the following:
   a. Simpson WB 126 wall bracing with 3-16d nails at each end and 1-8d nails at each stud.
   b. Plywood sheathing of a minimum thickness of 7/16 inch.
3. Fire stopping:
   a. Fireblock stud spaces over 10' in height, furred spaces, soffits, drop ceilings, cove ceilings, stair stringers at top and bottom of run, bearing walls and ceiling joist lines, etc. Firestopping shall consist of 2" nominal lumber.
   b. Firestop openings around vents, pipes, ducts, chimneys, and fireplaces at ceiling and floor levels with approved noncombustible materials.
4. CDX plywood is not approved where exposed to weather, i.e., roof overhangs.
5. Exterior wall framing to be 2"x4" studs at 16" o.c. Interior wall, framing at non-bearing walls to be 2"x4" studs at 24" o.c. and at bearing walls 2"x4" studs at 16" o.c. with double top plate.
6. Shear wall to be 7/16" Sheathing, see detail.
7. All stress grade lumber shall comply with WCLA specs and bear approval stamp on all pieces in place.
8. Framing lumber shall be Douglas Fir construction grade Fb 1450 or better unless otherwise noted.
9. Nailing to be per current U.B.C. unless otherwise noted.
10. All bearing partitions shall have double top plates.
11. Structural glued laminated timbers to be stamped by an approved agency.
12. Use redwood or pressure treated sole plates at all exterior walls.


2 x 4 Truss with
plywood Gusset
24" O.C. 7/16
OSB Sheathing
2 x 4
Pressure
Treated Sole
Plate
Concrete Floor with
raised edge

General								
GN1		1	96 high wall	Siding-4	47	0	ft	
GN2		1		heated ceiling area	140.00	0.00	sq ft	
GN3		1		heated floor area	140.00	0.00	sq ft	
GN4		1		heated wall area	344.00	0.00	sq ft	
GN5		1		heated glass area	12.00	0.00	sq ft	
GN6		1		heated door area	20.00	0.00	sq ft	
GN7		2	57 1/4 high wall	Siding-4	19	0	ft	
								Subtotal:
Subfloor								
SF1		1	8'x4'x3/4"	Sheet Plywood	4	0		
SF2		1	2x8"-10'	ceiling joists - lumber	7	0		
								Subtotal:
Framing								
F1		1	2x4-16ft+	fir plate	160	0	ft	
F2		1	2x4-16ft+	fir stud stock	260	0	ft	
F3		1	2x4"-91 1/2"	fir stud	29	0		
F4		1	2x4"-70 1/2"	fir stud	2	0		
F5		1	2x4-16ft+	header - lumber	6	0	ft	
F6		1	2x8-16ft+	header - lumber	15	0	ft	
F7		2	2x4-16ft+	fir stud stock	46	0	ft	
F8		2	2x4-16ft+	fir plate	50	0	ft	
								Subtotal:
Siding								
S1		1	7" wide	Siding Wood White	843	0	ft	
S2		1		house wrap	383.00	0.00	sq ft	
S3		2	7" wide	Siding Wood White	109	0	ft	
								Subtotal:
Ext Trim								
EX1		0	4" thick	- concrete grey	2.66	0.00	cu yd	
EX2		1	1x5-12"	door threshold	2	0		
EX3		1	1x4-16ft+	ext. door casing - color white	27	0	ft	
EX4		1	5 in	ext. door jamb - color white	27	0	ft	
EX5		1	1x4-16ft+	exterior sill - color white	5	0	ft	
EX6		1	1x4-16ft+	ext. window casing - color white	18	0	ft	
EX7		1	1x5-30"	door threshold	1	0		
EX8		1	1x6 in (2')	corner board - color white	32	0	ft	
								Subtotal:
Roofing								
R1		1	2x8"-16'	ridge board - lumber	1	0		
R2		1	2x6"-16'+	rafters - lumber	128	0	ft	
R3		1	2x6"-16'	rafters - lumber	2	0		
R4		1	2x6"-10'	rafters - lumber	4	0		
R5		1	2x4"-16'+	rafters - lumber	18	0	ft	
R6		1		ridge vent	16	0	ft	
R7		1		ridge cap	16	0	ft	
R8		1		Roofing Dimensional Comp	230.00	0.00	sq ft	
R9		1	4x8' sheets	roof sheathing	8	0		
R10		1	2x6"	gable fascia	31	0	ft	
R11		1	2x6"	eave fascia	30	0	ft	
R12		1		metal drip edge	61	0	ft	
								Subtotal:
Insulation								
IN1		1	12x24x48" batts	ceiling insulation	17	0		
IN2		1	12x16x48" batts	floor insulation	26	0		
IN3		1	4x16x93" batts	wall insulation	32	0		
								Subtotal:
Flooring								
FL1		1	2 1/4" wide	Flooring Oak-Golden	664	0	ft	
Wall Bd								
WB1		1	4'x8'x1/2"	Sheet Sheetrock	12	0		
WB2		1		Color Bone White	124.00	0.00	sq ft	
WB3		1	4'x8'x3/4"	Sheet Sheetrock	4	0		
WB4		2	4'x8'x1/2"	Sheet Sheetrock	2	0		
								Subtotal:
Windows								
W1		1	24x36	single hung	2	0		
Doors								
D1		1		handle: Lever (decorative)	1	0		
D2		1		handle: Exterior Handle (ext.)	1	0		
D3		1		lock: Dead Bolt (interior)	1	0		
D4		1		lock: Dead Bolt (exterior)	1	0		
D5		1		hinge: hidden	3	0		
D6		1	30x80x1 3/4R	ext 30/68 19	1	0		
								Subtotal:
Int Trim								
T1		1	1x4-16ft+	interior casing	46	0	ft	
T2		1	1x4-16ft+	window apron	5	0	ft	
T3		1	1x4-16ft+	sill	5	0	ft	
T4		1	1x6-16ft+	base molding	46	0	ft	
								Subtotal:
								Total:

BUILDING CONTRACTOR/HOME OWNER TO REVIEW AND VERIFY ALL DIMENSIONS, SPECS, AND CONNECTIONS BEFORE CONSTRUCTION BEGINS. BARN TO BE BUILT AS PER LOCAL CODE REQUIREMENTS

To the best of my knowledge these plans are drawn to comply with owner's and or builder's specifications and any changes made on them after plans are made will be done at the owner's and / or builder's expense and responsibility. The contractor shall verify all dimensions and enclosed drawing. SDS-CAD is not liable for errors, omissions that has begun. While every effort has been made in the preparation of this plan to avoid mistakes, the maker can not guarantee against human error. The contractor of the job must check all dimensions and other details prior to construction and be responsible therefore. All calculations and member sizing should be verified for your building by a certified building official.

#G488 10 x 14 x 8 Shed - Chicken Coop
By SDS-CAD Specialized Design Systems

Page 1	Title Main Floor Plan
Page 2	Elevation Views
Page 3	Floor Plan & Pictorials
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Page 5	Detail Page
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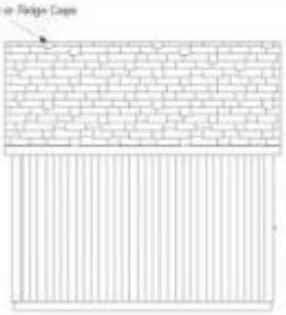
30 year architectural shingles and structural panel siding. Siding schedule is 8" o.c. on wall, 12" o.c. on gable end walls. Framing is 2'-0" o.c. on 14'0" centers. 8' siding height.

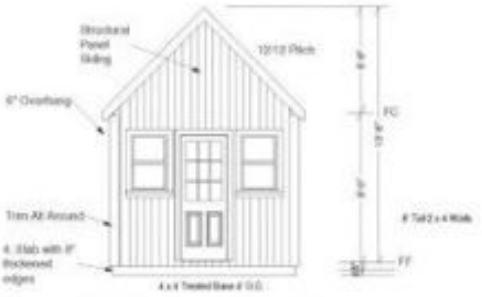
SCALE 1/4"=1'

MAIN FLOOR PLAN

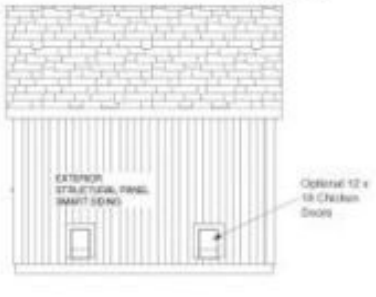
REAR ELEVATION



LEFT ELEVATION



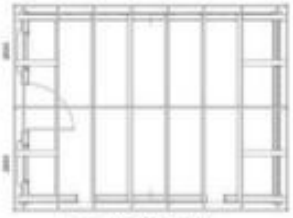
FRONT ELEVATION

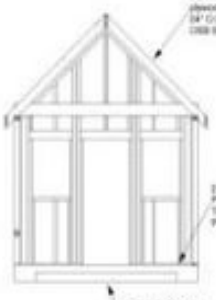


RIGHT ELEVATION

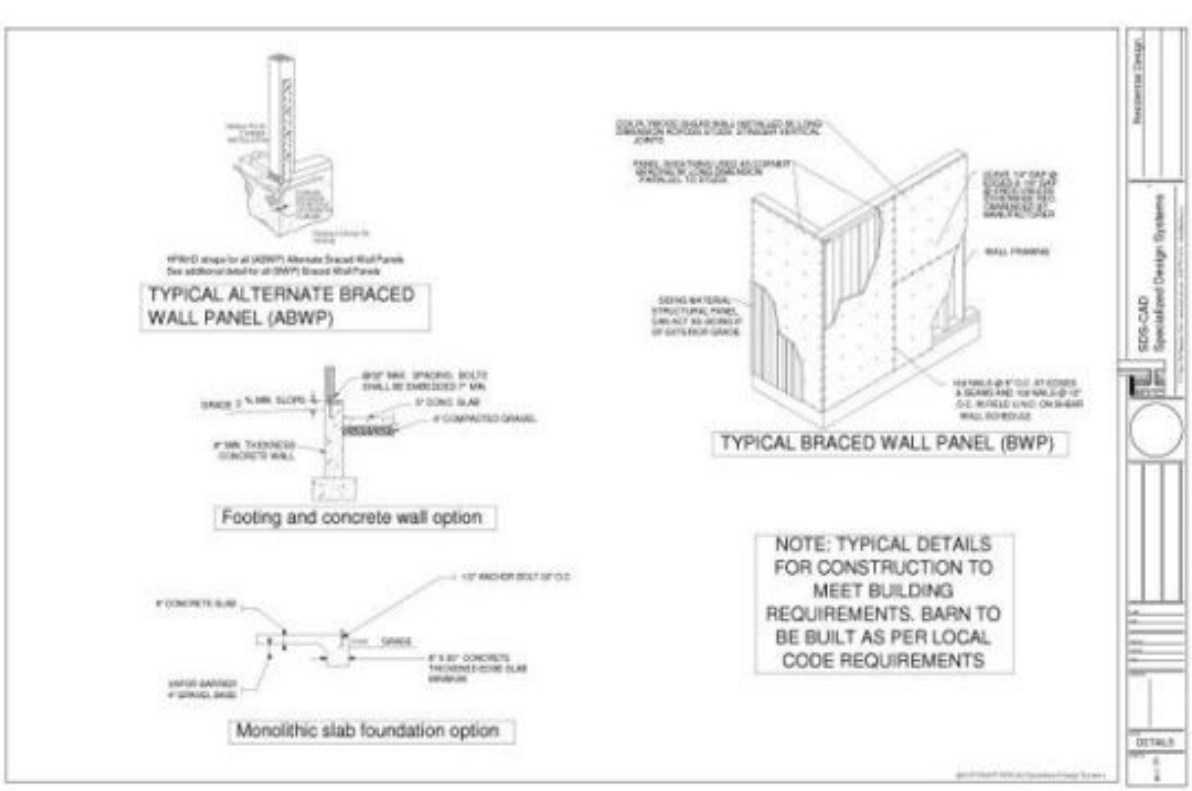
PICTORIAL VIEW

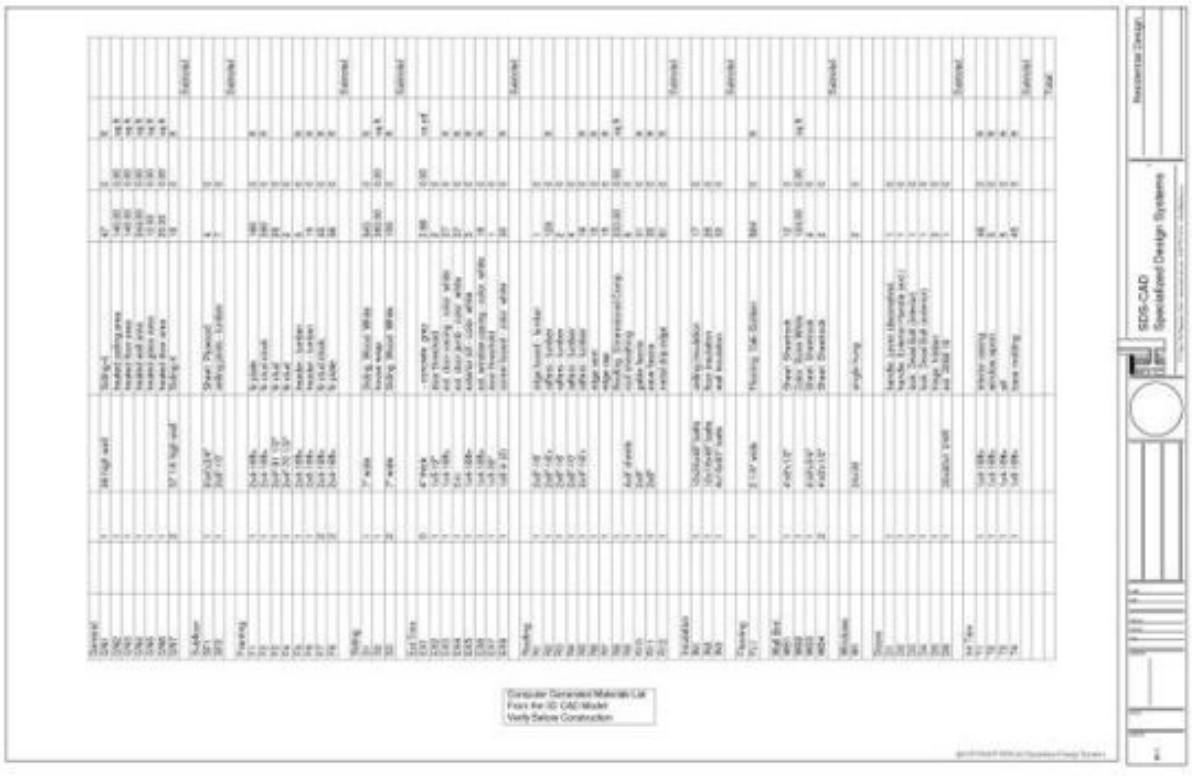
FLOOR AND BASE PLAN





WALL FRAMING SECTIONS


TYPICAL ALTERNATE BRACED WALL PANEL (ABWP)
TYPICAL BRACED WALL PANEL (BWP)
Footing and concrete wall option
Monolithic slab foundation option
NOTE: TYPICAL DETAILS FOR CONSTRUCTION TO MEET BUILDING REQUIREMENTS. BARN TO BE BUILT AS PER LOCAL CODE REQUIREMENTS
SDS-CAD
DETAILS



12’ x 12’ Chicken Coop Plans

This is the little chicken coop that inspired the next little coop design

Http://TheGardenShed.net
Http://Build-Chicken-Coop.com

BUILDING CONTRACTOR/HOME OWNER TO REVIEW AND VERIFY ALL DIMENSIONS, SPECS, AND CONNECTIONS BEFORE CONSTRUCTION BEGINS. SHED TO BE BUILT AS PER LOCAL CODE REQUIREMENTS

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#G489 12 x 12 x 8 Shed - Playhouse - Chicken Coop
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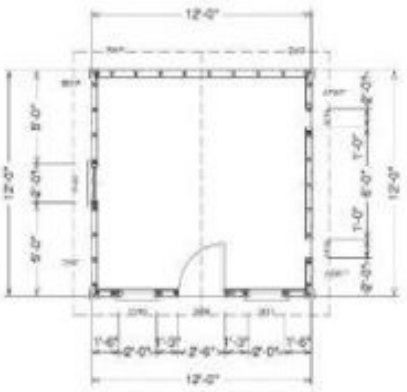
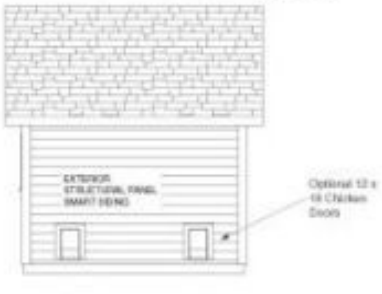


MAIN FLOOR PLAN

REAR ELEVATION

LEFT ELEVATION

FRONT ELEVATION



RIGHT ELEVATION

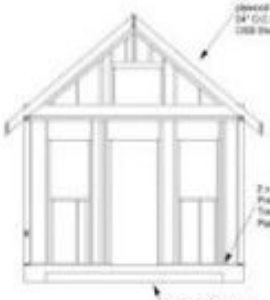
Concrete
1. All slabs are to be min 6" concrete over 4" gravel unless otherwise noted on the plans.
2. Concrete to be ACI 301-05. Type II cement, 2500 psi at 28 days. 5" maximum slump.
3. If required reinforcing to be ASTM A615 Bars with Fyx60 ksi lamp 50 diameter minimum at splices or weld per ACI Std.
4. Concrete design based on Fc i 500 psi; Fc 2500 psi for quality only.
5. Anchor bolts shall be A-307 embedded 7" minimum into concrete or masonry grout.

PICTORIAL VIEW

FLOOR AND BASE PLAN

Roof framing 24" O.C. Tusses or 2 x 6 Rafters with 2 x 6 Ridge Beam and 2 x 4 Ceiling Joists

Framing views are for basic reference only



2 X 4 Studs 16" O.C.

WALL FRAMING SECTIONS

General framing (Douglas Fir)

1. Minimum header sizes shall be according to the following table unless otherwise noted. Header sizes (single story construction)
   2'-0" to 4'-0" Span: 2-2x4's
   4' + to 6'-0" Span: 2-2x6's
   6' + to 8'-0" Span: 2-2x8's
   8' + to 10'-0" Span: 2-2x10's
   10' + to 12'-0" Span: 2-2x12's or as noted on plan.
2. Brace all exterior walls and cross wall partitions at each end of building and at least every 25' of length by one of the following:
   a. Simpson WB 108 wall bracing with 3-16d nails at each end and 1-16d nails at each stud.
   b. Plywood sheathing of a minimum thickness of 7/16 inch Fire stopping.
3. a. Fire stop all concealed spaces, including furred spaces, soffits, drop ceilings, cove ceilings, stair stringers at top and bottom of run, bearing walls and ceiling joist lines, etc. Fireblocking shall consist of 2" nominal lumber.
   b. Fireblock openings around vents, pipes, ducts, chimneys, and fireplaces at ceiling and floor levels with approved noncombustible materials.
4. CDX plywood is not approved where exposed to weather, i.e., roof overhangs.
5. Exterior wall framing to be 2"x4" studs at 16" o.c. Interior wall framing at non-bearing walls to be 2"x4" studs at 24" o.c. and at bearing walls 2"x4" studs at 16" o.c. with double top plate.
6. Shear wall to be 7/16" Sheathing, see detail.
7. All stress grade lumber shall comply with WCLA specs and bear approved stamp on all pieces in place.
8. Framing lumber shall be Douglas Fir construction grade Fb 1450 or better unless otherwise noted.
9. Nailing to be per current I.B.C. unless otherwise noted.
10. All bearing partitions shall have double top plates.
11. Structural glued laminated timbers to be stamped by an approved agency.
12. Use metal or pressure treated sole plates at all exterior walls.

Roof framing

1. Fascia to be 2"x Douglas Fir.
2. For soffit size see details.
3. For spans and dimensions refer to floor plans.
4. Use Simpson H1 hurricane anchors at each truss or rafter to wall connection.
5. Solid blocking required between joists, rafters, and trusses over all bearing walls. Such blocking shall be 1 1/2" minimum thickness and full depth of joists, rafters, or trusses.
6. Minimum header sizes shall be according to the header size table unless otherwise noted.
7. Basis of design roof live/snow load of 40 psf, and roof dead load of 15 psf.
8. Plywood roof decking to be 5/8" thick, 24/0, CDX or 3/8 wafer.
9. 4:12 Pitch Engineered Attic Scissor Trusses.

Residential Design
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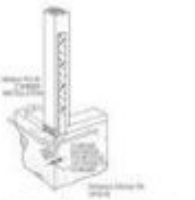
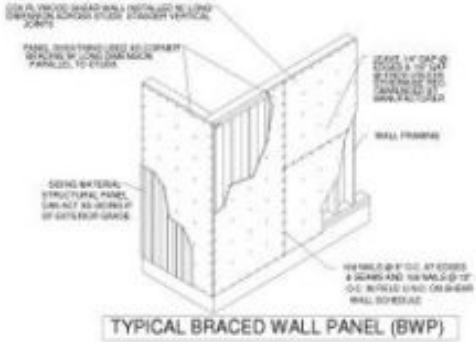
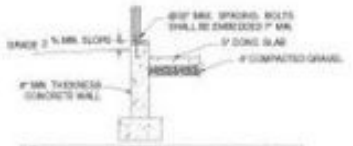


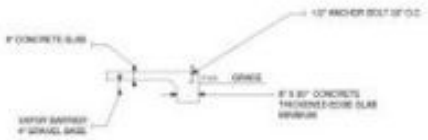
TYPICAL ALTERNATE BRACED WALL PANEL (ABWP)



TYPICAL BRACED WALL PANEL (BWP)

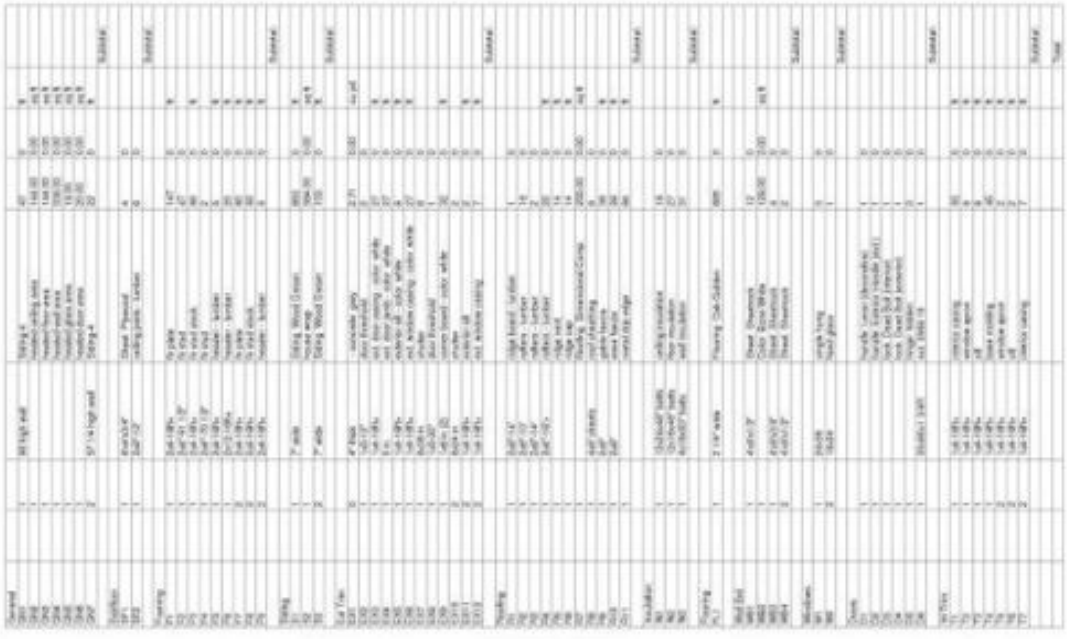


Footing and concrete wall option

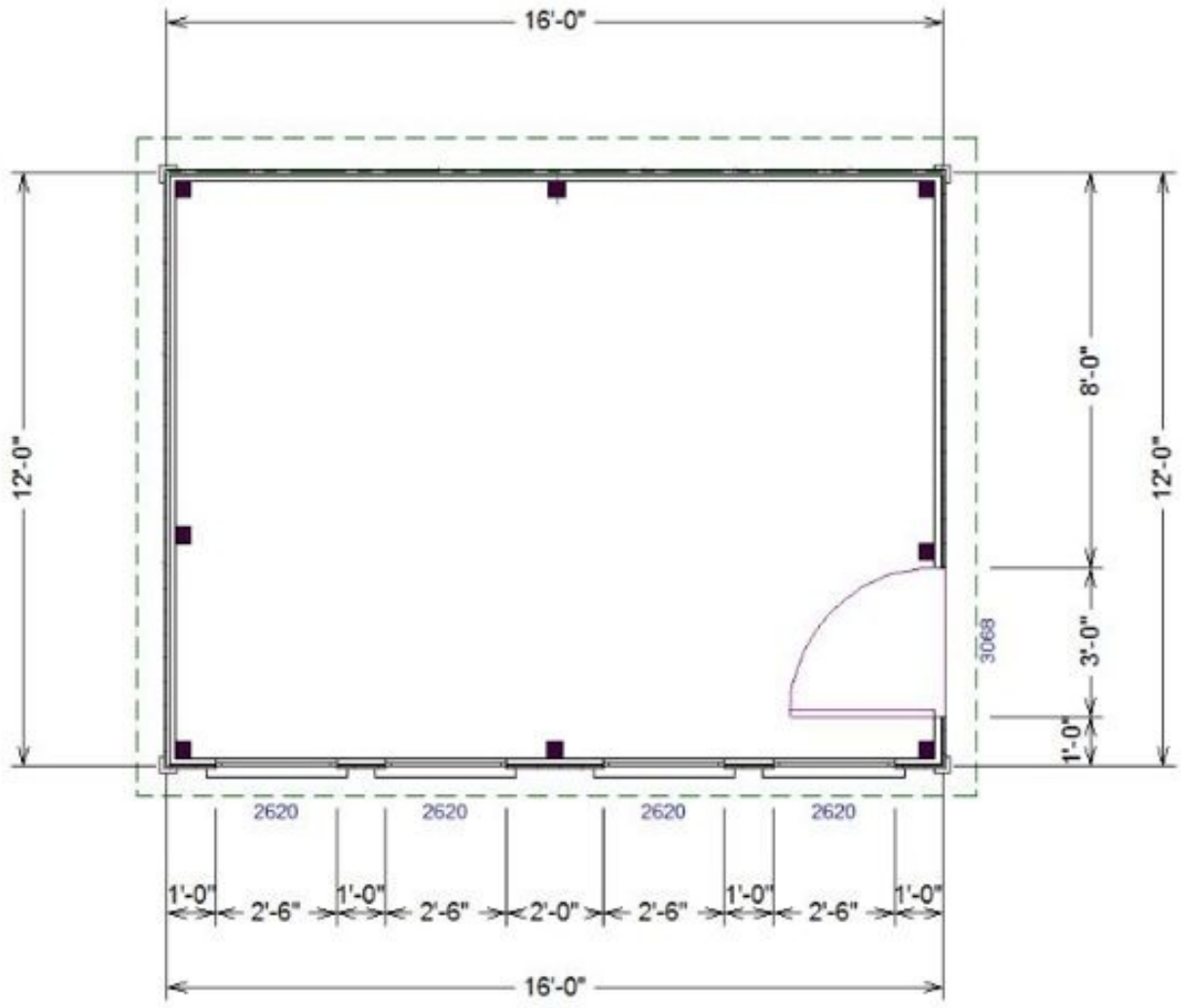


Monolithic slab foundation option

NOTE: TYPICAL DETAILS FOR CONSTRUCTION TO MEET BUILDING REQUIREMENTS. BARN TO BE BUILT AS PER LOCAL CODE REQUIREMENTS



Bonus Plans 12’ X 16’ Chicken Coop Pole Barn Option



Complete high resolution plans are available later in the book for downloading and printing.

They have a really nice herb garden in front of their coop.

I built the chicken coop as a pole barn. I used end treated posts to protect against the moisture in the ground. I dug the holes 30” into the ground and used post mix concrete to set them in place.

The coop is 16’ x 12’, I placed the posts 8’ a part on the front and back side of the building.

On the ends I put the post at 8’ and 4’ spacing.

I put the horizontal 2 x 6 boards every 2’ . This shows that the back of the building is 6’ tall and the front is 8’ tall. I then blocked out for a door. I later cut the 2 x 6 to add a taller door to the coop.

The top rail on the front and back is a 2 x 10 to help hold the weight of the roof. Simpson H1 Straps were used on every other roof joist to hold it to that 2 x 10.

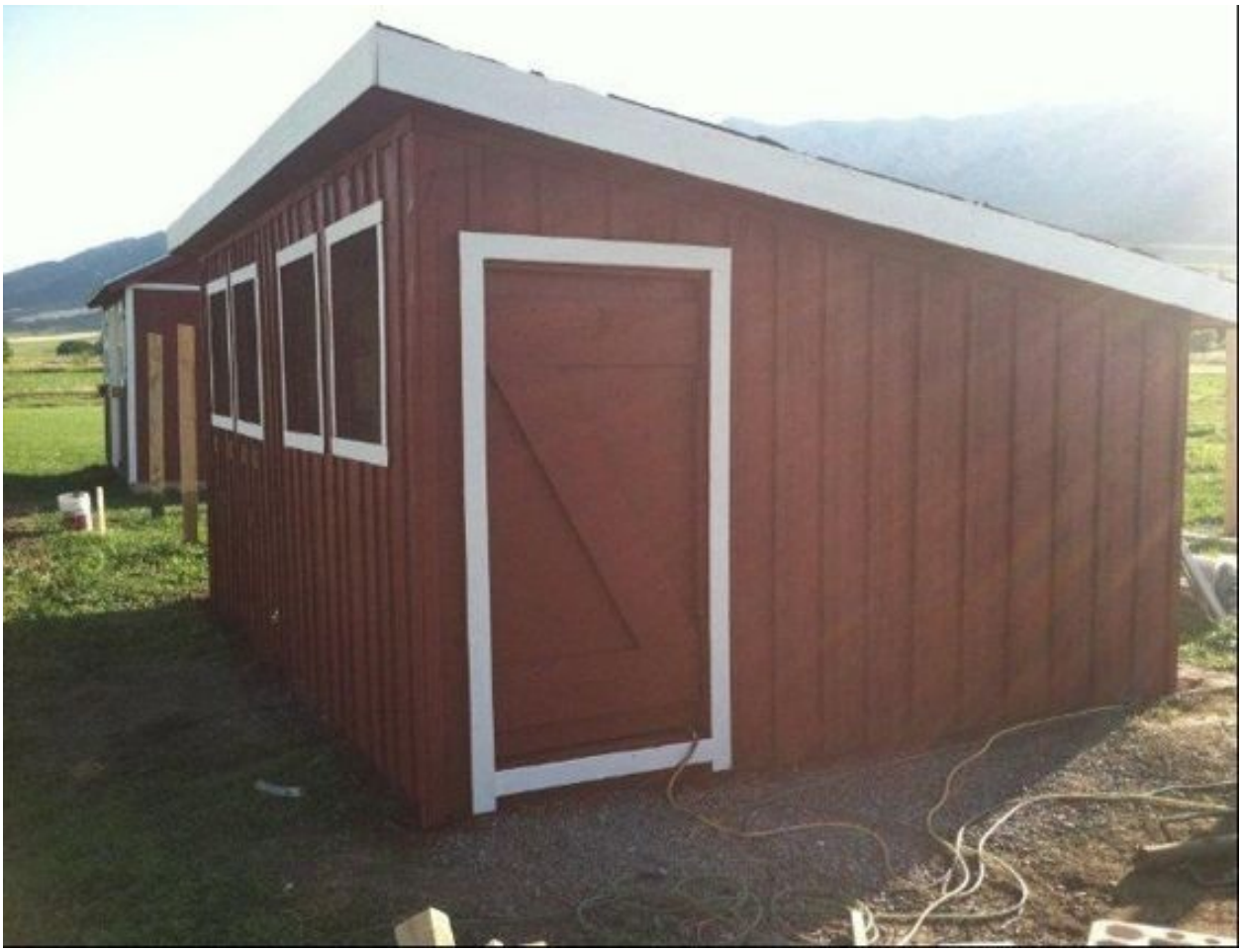
The roof is made of 2 x 6 boards 14’ long placed 16” o.c.

For the exterior of the building I decided to go with a traditional board and batten siding suing some pine that I had cut into 3/4 “ thick boards. You can use any exterior that you want from metal siding to panel siding. I used wood also to trim out the top edge or fascia of the building.

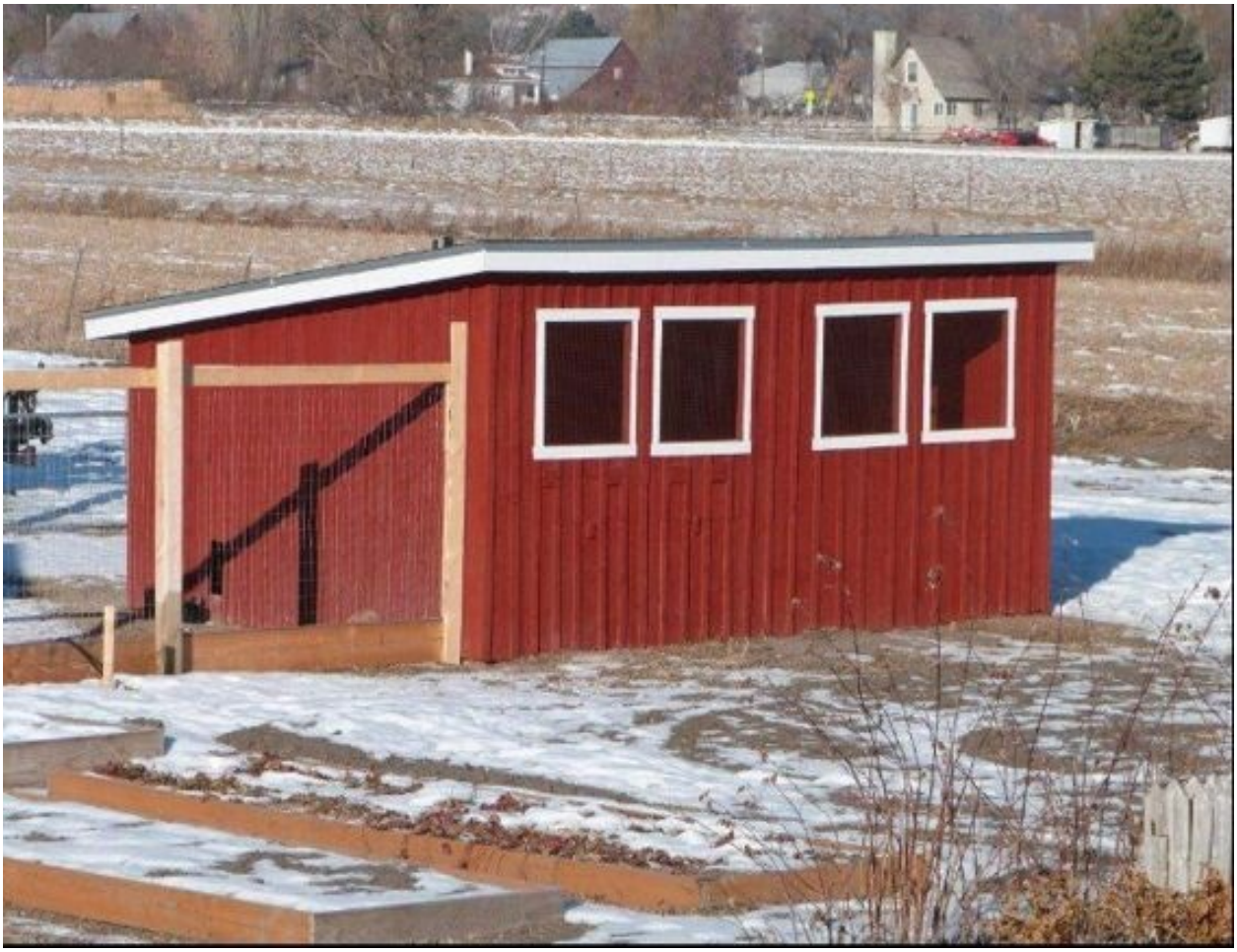
The board and batten siding is made by using 1 x 8 boards and nailing them up with a 1 inch gap and then placing a 2” board over the gap.

This is a picture of the framed in door.

We framed in 4 windows across the front and covered them with chicken wire.

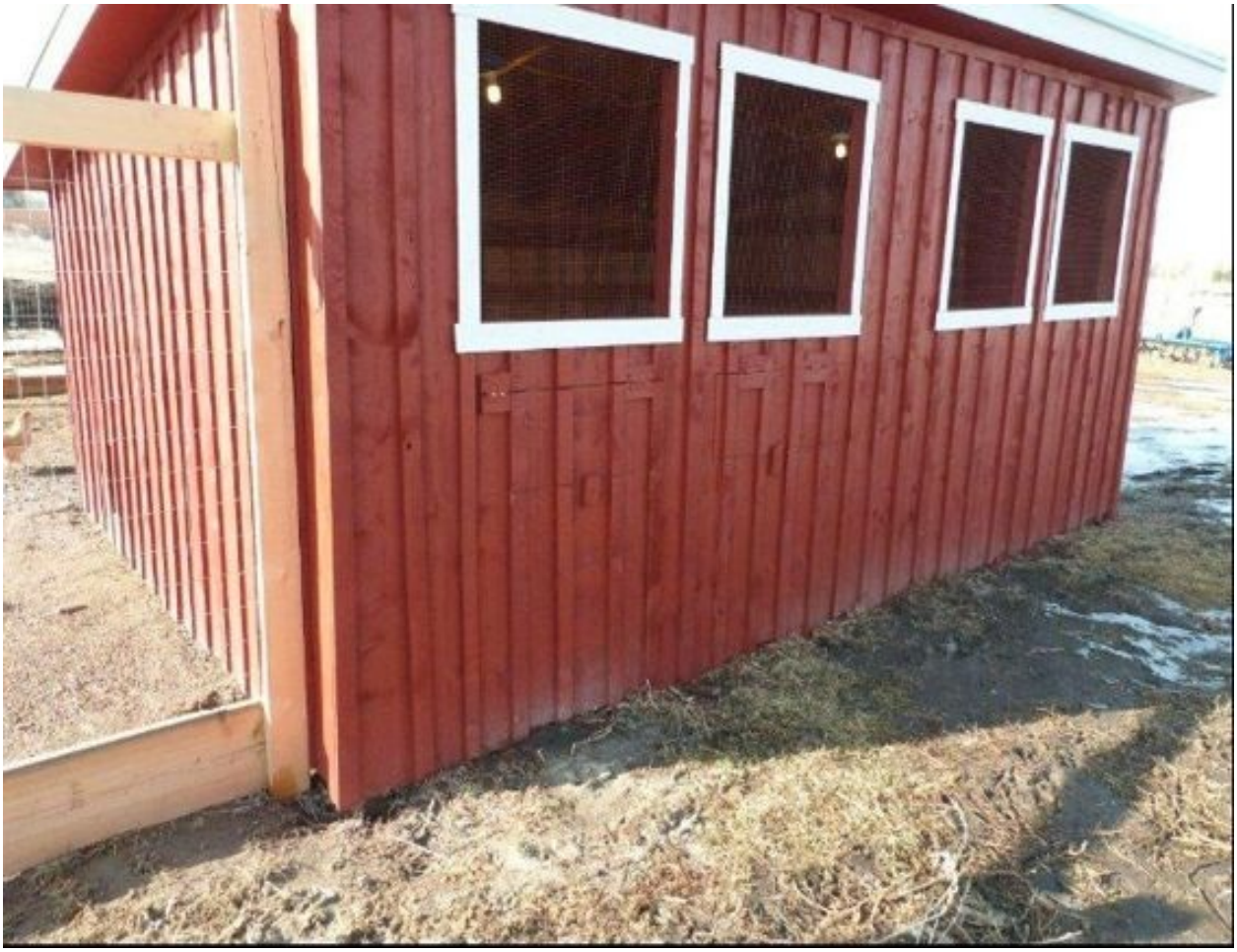


Here is the completed homemade door and the trim around it.



We built a chicken run that is 6’ high and about 30 x 40 attached the chicken coop. It works we well for them to go out. Depending on predators in your area you may have to put a top on the run.

We placed a small door on the wall for the chickens to enter the run. It has a door on it that can be closed if needed.



On the front of the chicken coop we added some small doors over the nesting boxes to be able to access the eggs without entering the chicken coop

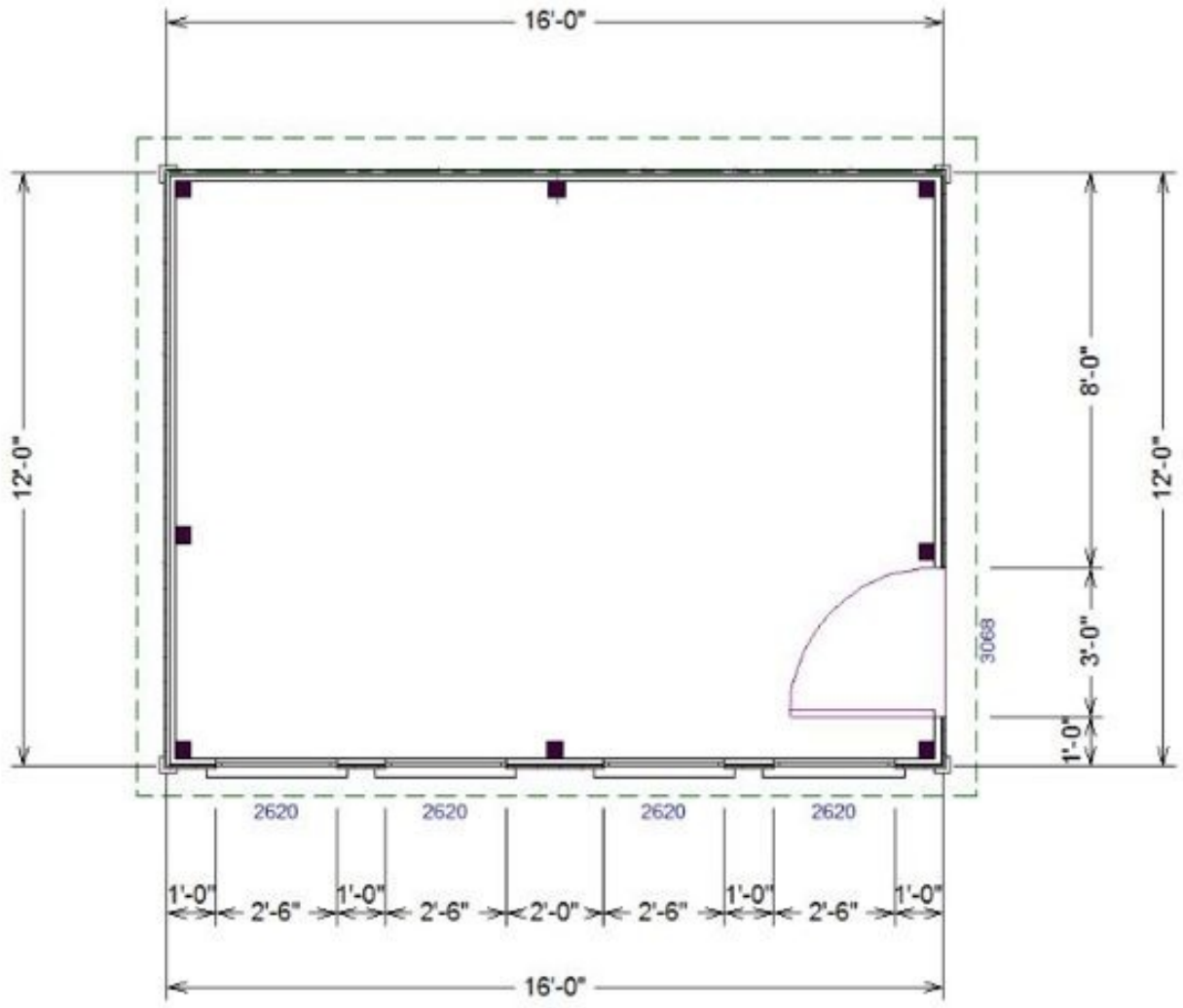
The doors open easily from the outside to check for eggs.

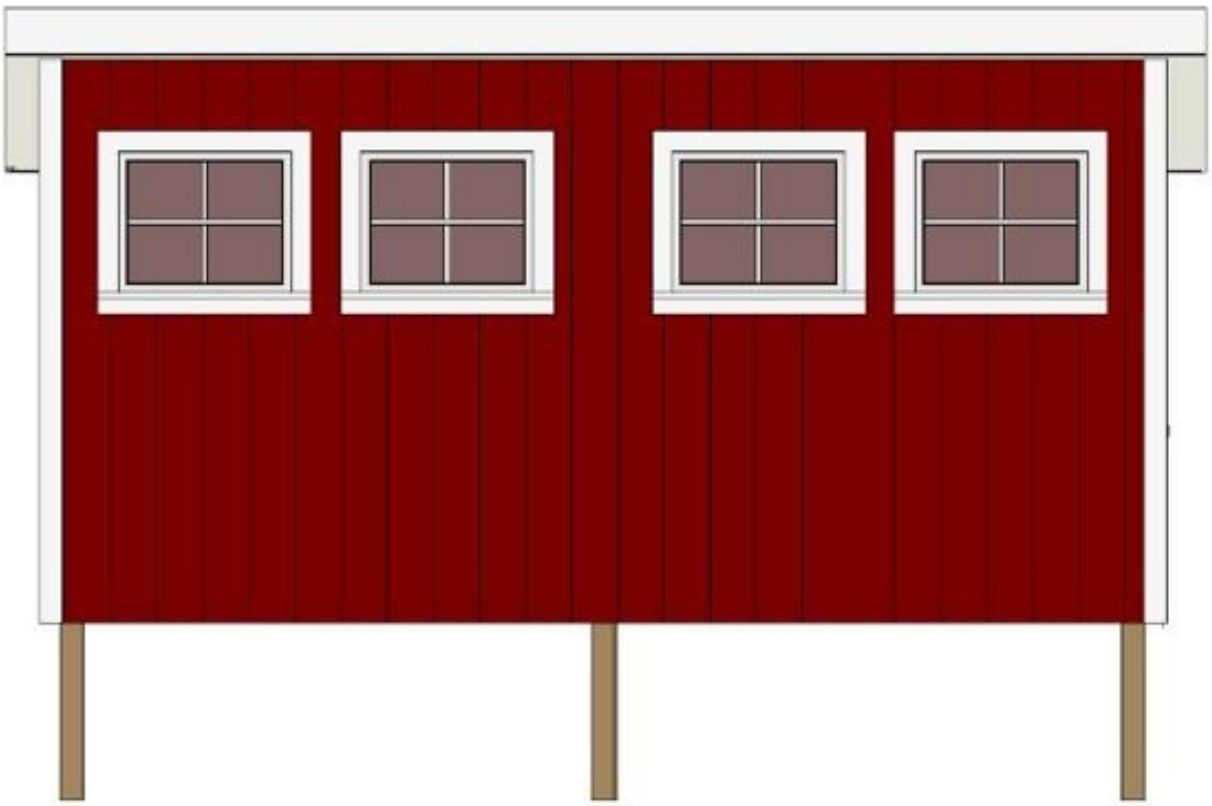
We put some basic nesting boxes together and added sawdust for the chickens to lay their eggs in.

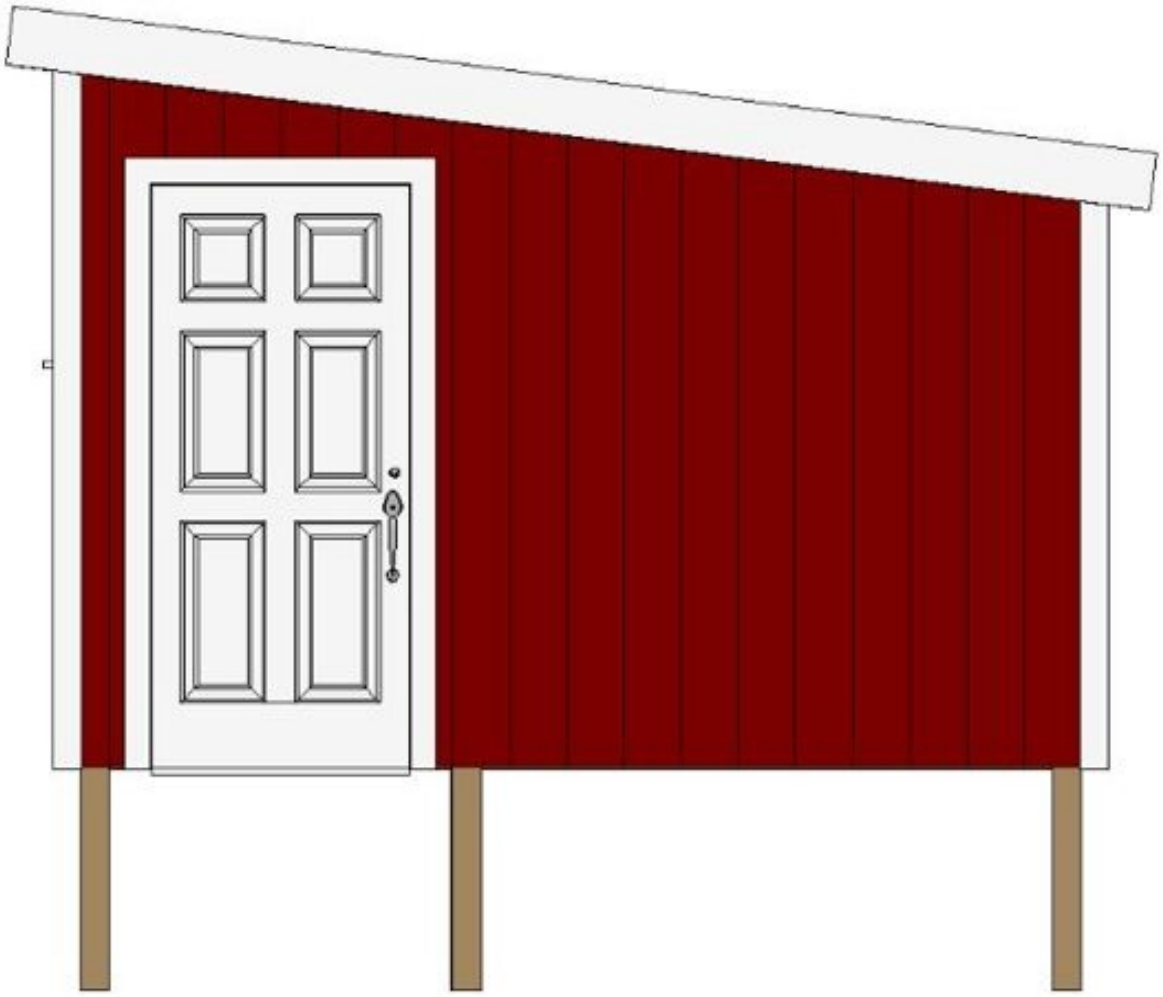
Here is the picture of a simple roosting ladder for the chickens to roost at night.

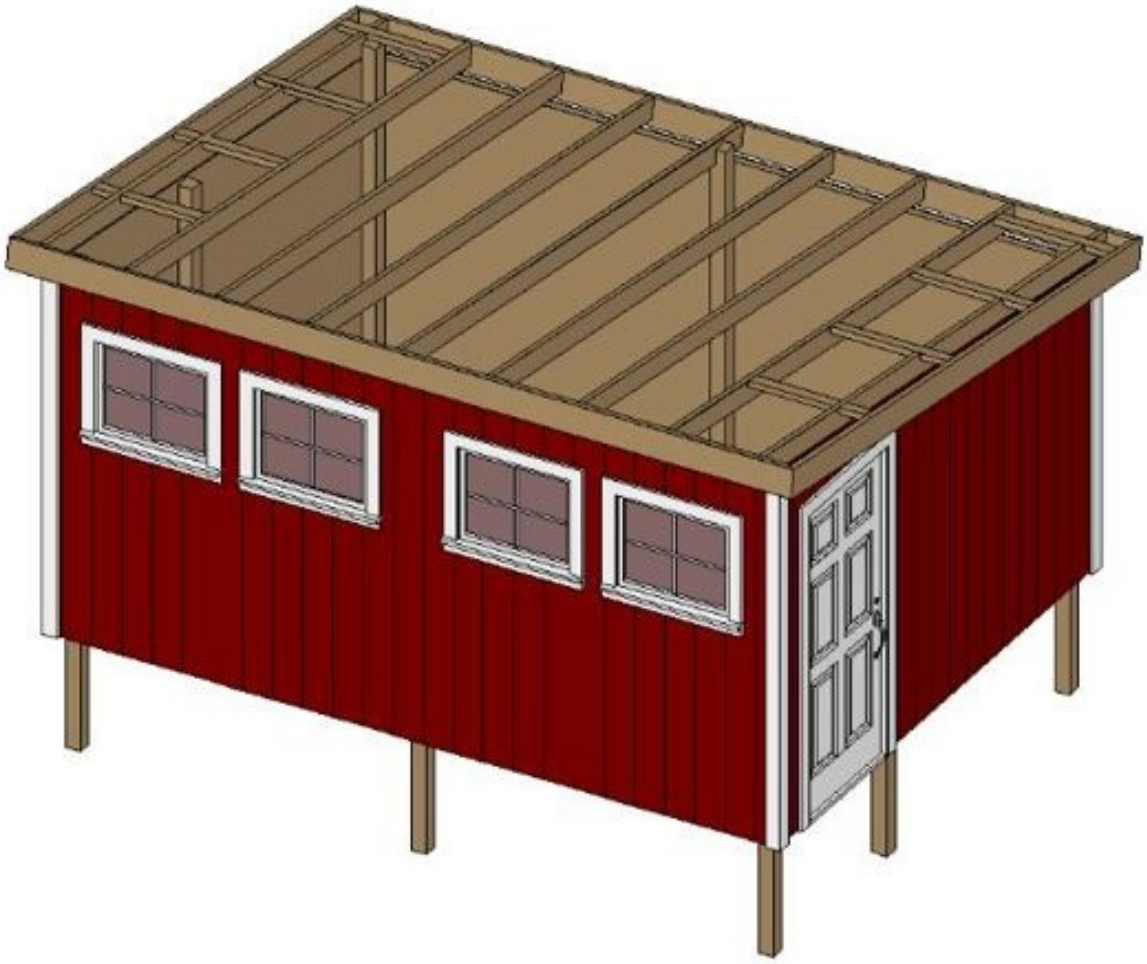
We made just a small door to enter the run. We made it so that it could be closed at night if we had any predator problems.

12’ X 16’ Chicken Coop Pole Barn Option


16'-0"
12'-0"
8'-0"
12'-0"
3'-0"
1'-0"
3068
2620
2620
2620
2620
1'-0"
2'-6"
1'-0"
2'-6"
2'-0"
2'-6"
1'-0"
2'-6"
1'-0"
16'-0"







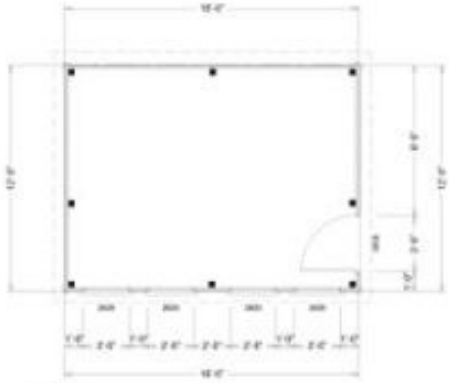
BUILDING CONTRACTOR/HOME OWNER
TO REVIEW AND VERIFY ALL DIMENSIONS,
SPECS, AND CONNECTIONS BEFORE
CONSTRUCTION BEGINS. SHED TO BE
BUILT AS PER IRC, UBC OR CURRENT LOCAL CODE

To the best of my knowledge these plans are drawn to comply with owner's and/ or builder's specifications and any changes made on them after prints are made will be done at the owner's and / or builder's expence and responsibility. The contractor shall verify all dimensions and enclosed drawing. SDSCAD is not liable for errors once construction has begun. While every effort has been made in the preparation of the plan to avoid mistakes, No maker can not guarantee against human error. The contractor of the job must check all dimensions and other details prior to construction and be solely responsible thereafter. All calculations and member sizing should be verified for your building by a certified building official.

G481 POLE BARN 12 X 16 X 8
Garden Shed Plan / Playhouse / Chicken Coop
By SDS-CAD Specialized Design Systems

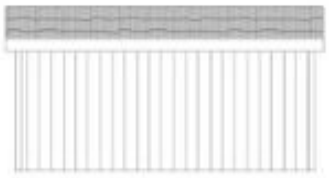
Page 1	Title Main Floor Plan
Page 2	Elevation Views
Page 3	Foundation Plan & Pictorials
Page 4	Framing and Details
Page 5	Detail Page
Page 6	Pole Barn Detail Option

16 axis dimensional shingles and horizontal siding over structural panel. Nailing schedule 4-6" on ends 12" on centers list nails. Trusses or rafters are 24" o.c. framing is 2" x 4" on 16" centers. 7'-6" ceiling height.



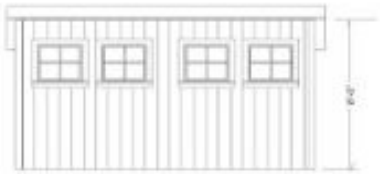
SCALE 1/4"=1'

GARAGE MAIN FLOOR PLAN



REAR ELEVATION

LEFT ELEVATION

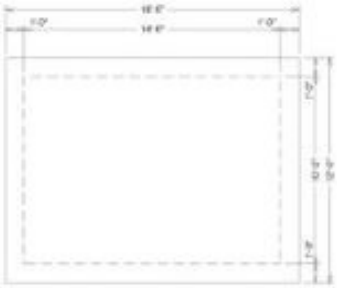


FRONT ELEVATION

SCALE 1/4"=1'

RIGHT ELEVATION

PICTORIAL VIEWS



FOUNDATION OPTION

SCALE: 1/4"=1'

Concrete:

1. All slabs are to be 4" concrete over 4" gravel unless otherwise noted on the plans.
2. Concrete to be ACI 301-06, Type II cement, 2500 psi at 28 days, 5" maximum slump.
3. If required reinforcing to be ASTM A615 Bars with Fy=60 ksi lamp 30 diameter minimum at splices or weld per ACI 5td.
4. Concrete design based on f'c 2000 psf, f'c 2500 psi for quality only.
5. Anchor bolts shall be A-307 embedded 7" minimum into concrete or masonry grout.
6. All footings minimum 24" below final grade
7. Sloped 1" per 1/3 to door Thickened edge slab 12" x 24"

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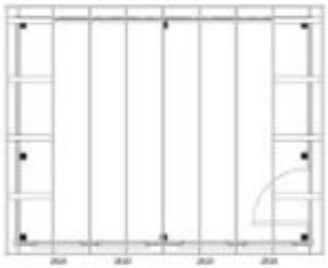

SHED ROOF TRUSSES OR 2 x 6 RAFTER 16" o.c.

4 x 4 Pressure Treated Poles min
2 x 6 horizontal purlins 24" O.C.

WALL FRAMING SECTIONS

SCALE: 1/8"=1'

General framing (Douglas Fir)

1. Minimum header sizes shall be according to the following table unless otherwise noted. Header sizes (single story construction)
   2'-0" to 4'-0" Span 2-2x4's
   4' + to 6'-0" Span 2-2x6's
   6' + to 8'-0" Span 2-2x8's
   8' + to 10'-0" Span 2-2x10's
   10' + to 12'-0" Span 2-2x12's or as noted on plan
2. Brace all exterior walls and cross-stud partitions at each end of building and at least every 25' of length by one of the following:
   a. Simpson WB 126 wall bracing with 3-10d nails at each end and 1 8d nails at each stud.
   b. Plywood sheathing of a minimum thickness of 7/16 inch.
3. Fire stopping
   a. Firestops shall square over 10' in height, furred spaces, soffits, drop ceilings, cove ceilings, stair stringers at top and bottom of run, bearing walls, and ceiling joint lines, etc.
   Fireblocking shall consist of 2" nominal lumber.
   b. Firestop openings around vents, pipes, ducts, chimneys, and fireplaces at ceiling and floor levels with approved noncombustible materials.
4. CDX plywood is not approved where exposed to weather, i.e., roof overhangs.
5. Exterior wall framing to be 2"x4" studs at 16" o.c. Interior wall framing at non-bearing walls to be 2"x4" studs at 24" o.c. and at bearing walls 2"x4" studs at 16" o.c. with double top plate
6. Shear wall to be 7/16" Sheathing, see detail.
7. All stress grade lumber shall comply with WCLIA specs and bear approval stamp on all pieces in place.
8. Framing lumber shall be Douglas Fir construction grade f'b 1450 or better unless otherwise noted.
9. Nailing to be per current I.C.B.C. unless otherwise noted.
10. All bearing partitions shall have double top plates.
11. Structural glued laminated timbers to be stamped by an approved agency.
12. Use redwood or pressure treated sole plates at all exterior walls.

Roof Framing:

1. Fascia to be 2"x Douglas Fir.
2. For soffit size see details.
3. For spans and dimensions refer to floor plans.
4. Trusses are to be an approved truss design from the truss manufacturer's engineer.
5. Use Simpson H-1 hurricane anchors at each truss or rafter to wall connection.
6. Solid blocking required between joists, rafters, and trusses over all bearing walls.
   Such blocking shall be 1 ½" minimum thickness and full depth of joists, rafters, or trusses.
7. Minimum header sizes shall be according to the header size table unless otherwise noted.
8. Basis of design: roof live snow load of 31 psf, and roof dead load at 15 psf.
9. Plywood roof decking to be Min. ½" thick, 24/0, CDX or 5/8 exter.

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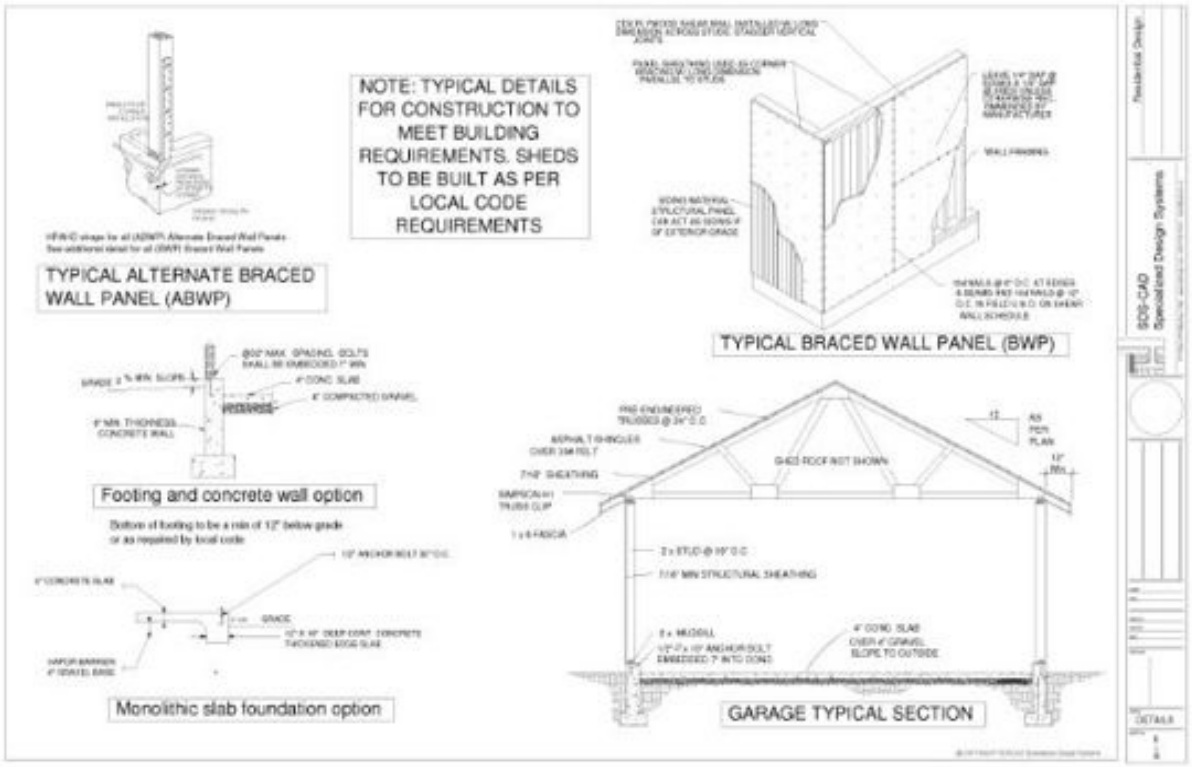
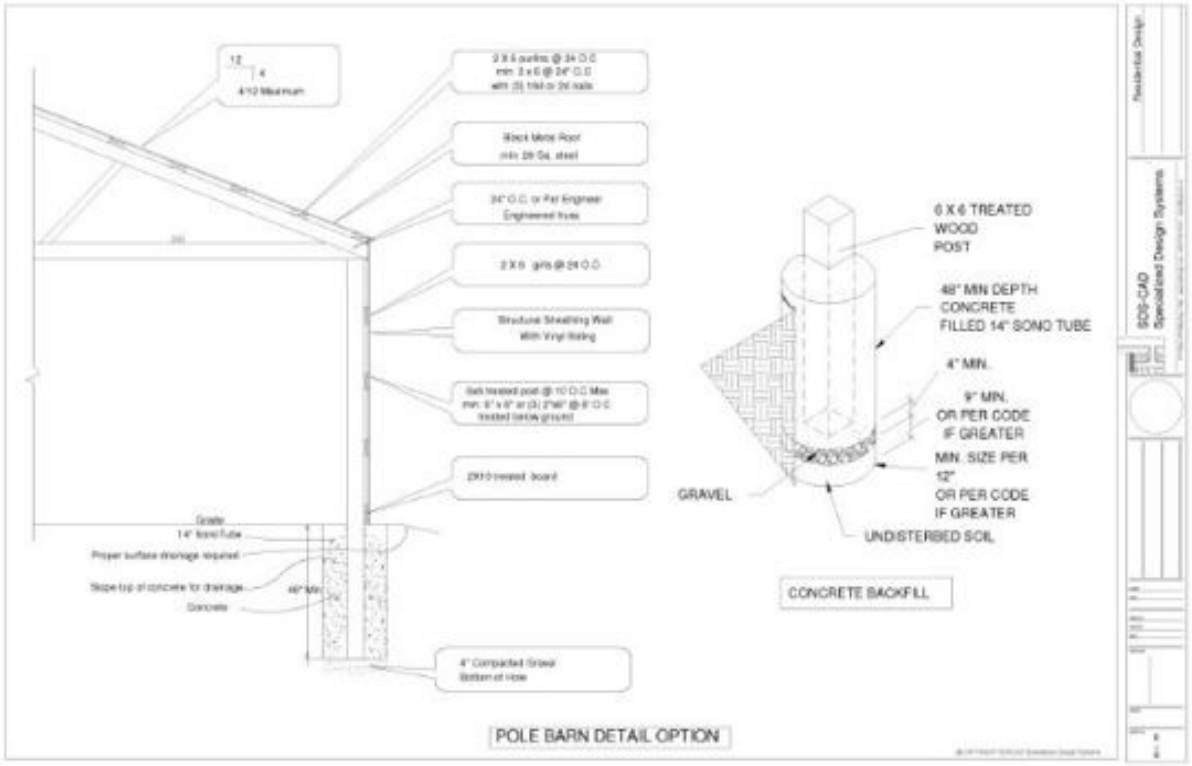
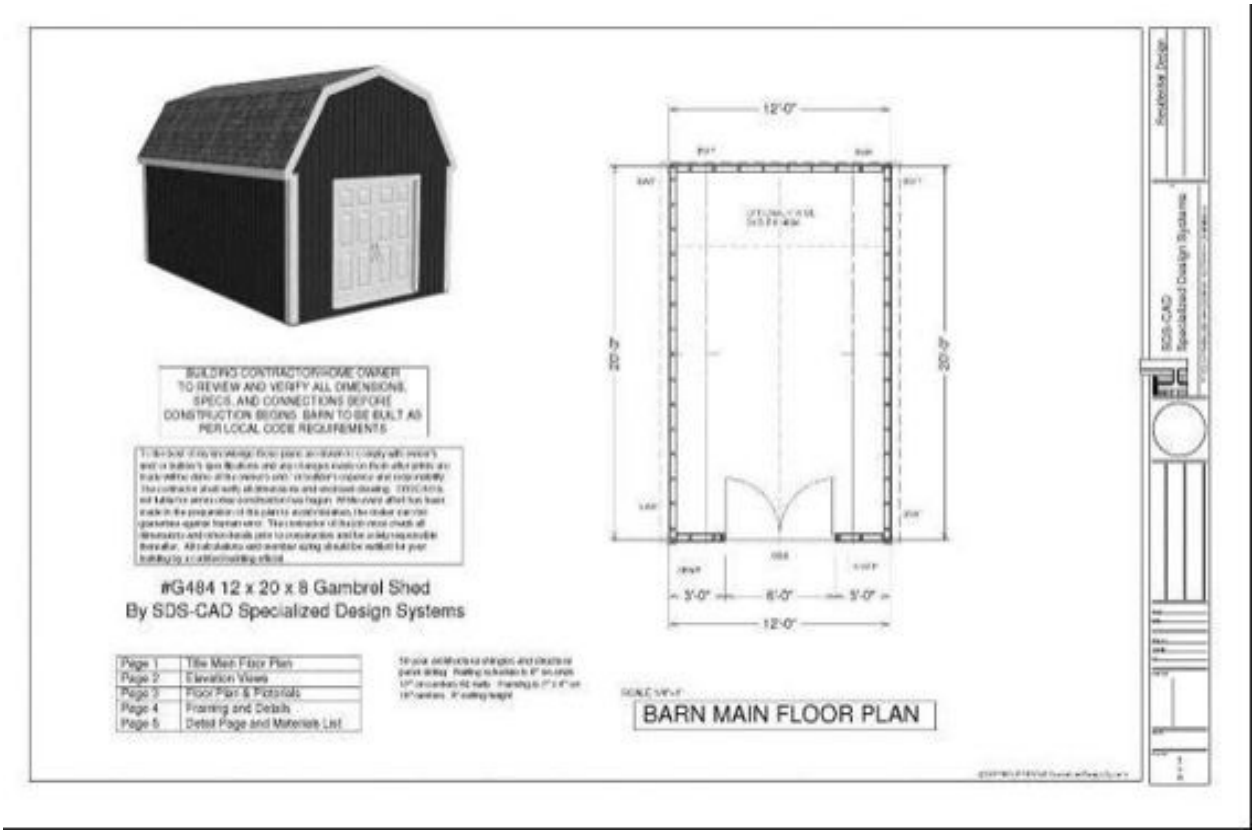

NOTE: TYPICAL DETAILS FOR CONSTRUCTION TO MEET BUILDING REQUIREMENTS. SHEDS TO BE BUILT AS PER LOCAL CODE REQUIREMENTS
TYPICAL ALTERNATE BRACED WALL PANEL (ABWP)
TYPICAL BRACED WALL PANEL (BWP)
Footing and concrete wall option
Monolithic slab foundation option
GARAGE TYPICAL SECTION

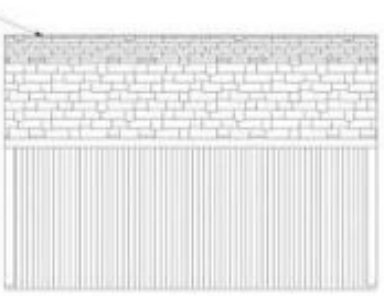

6 X 6 TREATED WOOD POST
48" MIN DEPTH CONCRETE FILLED 14" SONO TUBE
4" MIN.
9" MIN. OR PER CODE IF GREATER
MIN. SIZE PER 12" OR PER CODE IF GREATER
GRAVEL
UNDISTERBED SOIL
CONCRETE BACKFILL
POLE BARN DETAIL OPTION

12’ x 16’ Chicken Coop Plans Framed Version

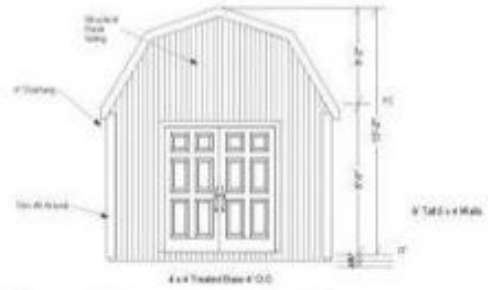
Plans 12 x 20 Gambrel Shed Plans


BUILDING CONTRACTOR/HOME OWNER TO REVIEW AND VERIFY ALL DIMENSIONS, SPECS, AND CONNECTIONS BEFORE CONSTRUCTION BEGINS. BARN TO BE BUILT AS PER LOCAL CODE REQUIREMENTS
#G484 12 x 20 x 8 Gambrel Shed
By SDS-CAD Specialized Design Systems
Page 1 Title Mast Floor Plan
Page 2 Elevation Views
Page 3 Floor Plan & Pictorials
Page 4 Framing and Details
Page 5 Detail Page and Materials List
12'-0"
20'-0"
3'-0"
6'-0"
3'-0"
BARN MAIN FLOOR PLAN
SDS-CAD Specialized Design Systems

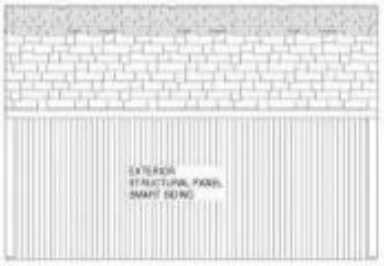
REAR ELEVATION



LEFT ELEVATION

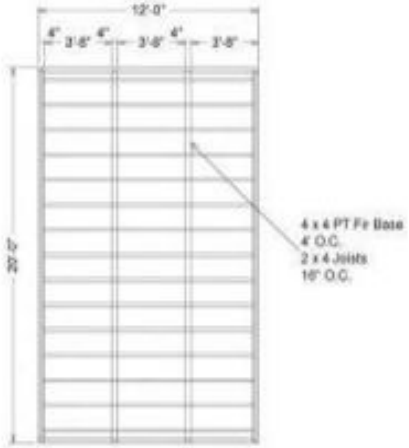


FRONT ELEVATION

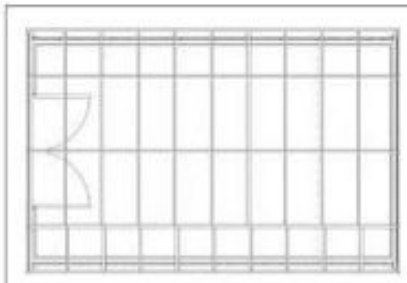


RIGHT ELEVATION

PICTORIAL VIEW



FLOOR AND BASE PLAN



General framing: (Douglas Fir)

1. Minimum header sizes shall be according to the following table unless otherwise noted. Header sized (single story construction):
   2'-0" to 4'-0" Span: 2-2x4's
   4' + to 6'-0" Span: 2-2x6's
   6' + to 8'-0" Span: 2-2x8's
   8' + to 10'-0" Span: 2-2x10's
   10' + to 12'-0" Span: 2-2x12's or as noted on plan
2. Brace all exterior walls and cross-stud partitions at each end of building and at least every 25' of length by one of the following:
   a. Simpson WS 108 wall bracing with 3-16d nails at each end and 1-8d nails at each stud
   b. Plywood sheathing of a minimum thickness of 7/16 inch
3. Fire stopping
   a. Firestops stud spaces over 10' in height, furred spaces, soffits, drop ceilings, cove ceilings, stud stringers at top and bottom of run, bearing walls and walling assemblies, etc.
   Firestopping shall consist of 2" nominal lumber
   b. Firestop openings around vents, pipes, ducts, chimneys and fireplaces at ceiling and floor levels with approved noncombustible materials.
4. CDX plywood is not approved where exposed to weather, i.e., roof overhangs.
5. Exterior wall framing to be 2"x4" studs at 16" o.c. Interior wall framing at non-bearing walls to be 2"x4" studs at 24" o.c. and at bearing walls 2"x4" studs at 16" o.c. with double top plate.
6. Shear wall to be 7/16" Sheathing, see detail.
7. All stress grade lumber shall comply with WCLA specs and bear approval stamp on all pieces in place.
8. Framing lumber shall be Douglas Fir construction grade Fb 1450 or better unless otherwise noted.
9. Nailing to be per current U.B.C. unless otherwise noted.
10. All bearing partitions shall have double top plates.
11. Structural glued laminated timbers to be stamped by an approved agency.
12. Use redwood or pressure treated sole plates at all exterior walls.

Roof Framing:

1. Fascia to be 2"x Douglas Fir.
2. For soffit size see details.
3. For spans and dimensions refer to floor plans.
4. Use Simpson H-1 hurricane anchors at each truss or rafter to wall connection.
5. Solid blocking required between joists, rafters, and trusses over all bearing walls. Such blocking shall be 1 1/2" minimum thickness and full depth of joists, rafters, or trusses.
6. Minimum header sizes shall be according to the header size table unless otherwise noted.
7. Base of design roof live/snow load of 40 psf, and roof dead load of 15 psf.
8. Plywood roof decking to be Min. 1/2" thick, 24/0, CDX or 3/8 water.
9. A12 Pitch Engineered Attic Scissor Trusses

Framing views are for basic reference only

Skylight Centered on Roof Between Trusses

2 x 4 Truss with plywood Gusset 24" O.C. 7/16 OSB Sheathing

2 X 4 Walls 16" O.C.

2 x 4 Joist 16" O.C. 3/4 T&G Floor

4 x 4 PT Base

WALL FRAMING SECTIONS

SCALE: 1/4"=1'

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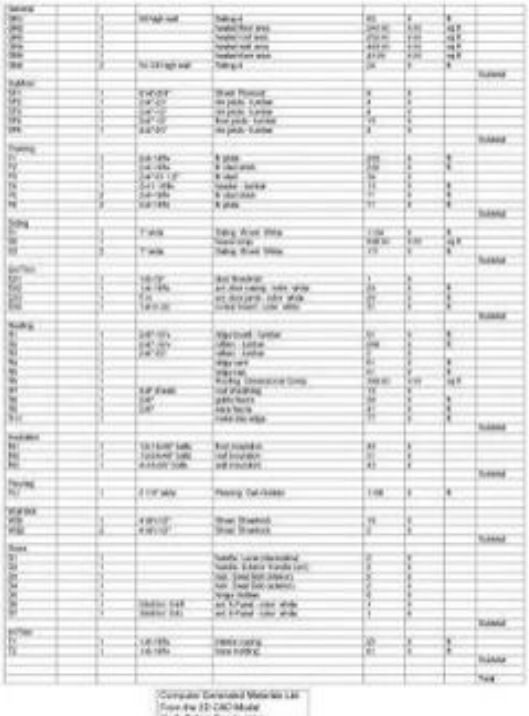
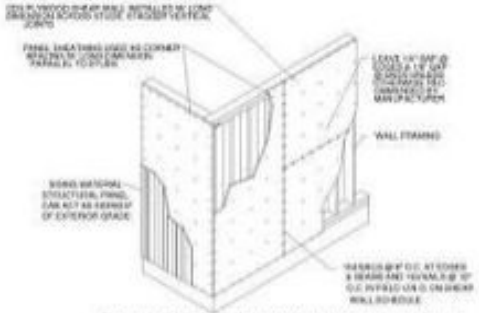
Horizontal Design

SDS-CAD Specialized Design Systems



Computer Generated Materials List
From the 3D CAD Model
Verify Before Construction



TYPICAL BRACED WALL PANEL (BWP)

NOTE: TYPICAL DETAILS FOR CONSTRUCTION TO MEET BUILDING REQUIREMENTS. BARN TO BE BUILT AS PER LOCAL CODE REQUIREMENTS

Horizontal Design

SDS-CAD Specialized Design Systems

DETAILS

12 x 14 Playhouse Shed Chicken Coop

How to build this little red garden shed

Video 1 Plans and Materials http://www.screencast.com/t/ZKMxNsdCxxp6

Video 2 Building the Floor http://www.screencast.com/t/106SiGQVdq

Video 3 Building the Walls http://www.screencast.com/t/XMbkaBiHQi

Video 4 Sheathing the Walls http://www.screencast.com/t/NFXVz2Gk

Video 5 Building the Roof Part 1&2 http://www.screencast.com/t/kxkD8VgA
http://www.screencast.com/t/z2SGAgJ6hbHj

Video 6 Sheathing the Roof http://www.screencast.com/t/VqhaVeKHSF

Video 7 Installing Windows http://www.screencast.com/t/bEZV0EEu

Video 8 Shingling the Roof http://www.screencast.com/t/5VoLXmEBjC00

Video 9 Installing Trim and Building Doors http://www.screencast.com/t/7Hu8owzsY2

Video 10 Building Interior Shelves http://www.screencast.com/t/tccpquesw

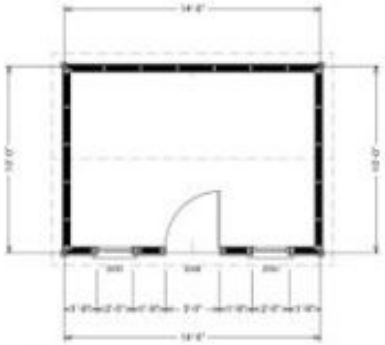
BUILDING CONTRACTOR/HOME OWNER
TO REVIEW AND VERIFY ALL DIMENSIONS,
SPECS, AND CONNECTIONS BEFORE
CONSTRUCTION BEGINS. GARAGE TO BE
BUILT AS PER IRC, UBC OR CURRENT LOCAL CODE

To the best of my knowledge these plans are drawn to comply with owner's and / or builder's specifications and any changes made on them after prints are made will be done at the owner's and / or builder's expence and responsibility. The contractor shall verify all dimensions and enclosed drawing. SDS-CAD is not liable for errors once construction has begun. While every effort has been made in the preparation of the plan to avoid mistakes, the maker can not guarantee against human error. The contractor of the job must check all dimensions and other details prior to construction and be solely responsible thereafter. All calculations and member sizing should be verified for your building by a certified building official.

G473 10 X 14 X 8 Garden Shed Plan / Playhouse
By SDS-CAD Specialized Design Systems

Page 1	Title Main Floor Plan
Page 2	Elevation Views
Page 3	Foundation Plan & Pictorials
Page 4	Framing and Details
Page 5	Detail Page
Page 6	Materials List

30 year dimensional shingles and horizontal siding over structural panel. Nailing schedule is 6" on ends 12" on centers for roofs. Trusses or rafters are 24" o.c. Framing is 2" x 4" on 16" centers. 7'-6" ceiling height.



SCALE 1/4"=1'

GARAGE MAIN FLOOR PLAN

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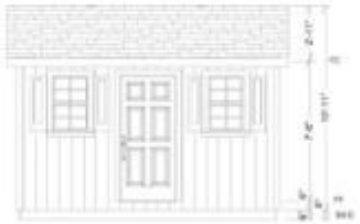
Residential Drafting

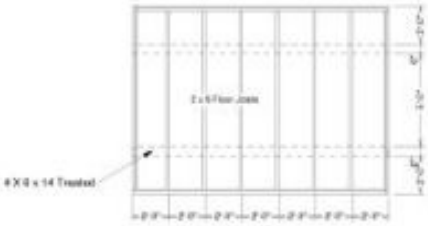
REAR ELEVATION

LEFT ELEVATION



FRONT ELEVATION

RIGHT ELEVATION



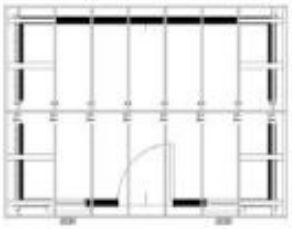
FLOOR SKID OPTION

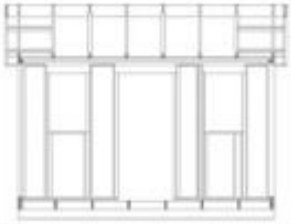
PICTORIAL VIEWS

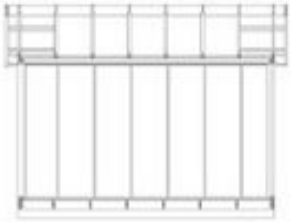
FOUNDATION OPTION

Concrete

1. All slabs are to be 4" concrete over 4" gravel unless otherwise noted on the plans.
2. Concrete to be ACI 301-66, Type II cement, 2500 psi at 28 days, 5" maximum slump.
3. If required reinforcing to be ASTM A615-Gars with Fy=60 ksi lamp 30 diameter minimum at splices or weld per ACI 5bd.
4. Concrete design based on Fc 2000 psi. Fc 2500 psi for quality only.
5. Anchor bolts shall be A-307 embedded 7" minimum into concrete or masonry grout.
6. All footings minimum 24" below final grade.
7. Sloped 1" per 10' to door Thickened edge slab 12" x 24"







GARAGE ROOF TRUSSES OR RAFTERS WITH RIDGE BEAM 24" o.c.

7-9" T-42 x 4-9Rafts
2 x 6 Floor Joists

General framing - Douglas Fir:

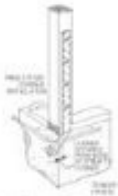
1. Minimum header sizes shall be according to the following table unless otherwise noted. Header sizes (single story construction)
   2'-0" to 4'-0" Span: 2-2x6's
   4' - 1 to 6'-0" Span: 2-2x8's
   6' - 1 to 8'-0" Span: 2-2x10's
   8' - 1 to 10'-0" Span: 2-2x12's
   10' - 1 to 12'-0" Span: 2-2x12's or as noted on plan
2. Brace all exterior walls and cross-stud partitions at each end of building and at least every 25'-0" length (in one of the following
   a. Simpson WS1/24 wall bracing with 3-16d nails at each end and 1 -8d nails at each stud.
   b. Plywood sheathing of a minimum thickness of 7/16 inch
3. Fire stopping
   a. Firestop openings around vents, pipes, ducts, chimneys, and fireplaces at ceiling and floor levels with approved noncombustible materials.
4. CDX plywood is not approved where exposed to weather, i.e., roof overhangs
5. Exterior wall framing to be 2"x4" studs at 16" o.c. Interior wall framing at non-bearing walls to be 2"x4" studs at 24" o.c. and at bearing walls 2"x4" studs at 16" o.c. with double top plate
6. Shear wall to be 7/16" Sheathing, see detail.
7. All stress grade lumber shall comply with WCLIA specs and bear stamp(s) (Gang- run grades) in place
8. Framing lumber shall be Douglas Fir construction grade Fb 1450 or better unless otherwise noted.
9. Nailing to be per current U.B.C. unless otherwise noted
10. All bearing partitions shall have double top plates
11. Structural glued laminated timbers to be stamped by an approved agency
12. Use redwood or pressure treated sole plates at all exterior walls

Roof Framing:

1. Fascia to be 2"x Douglas Fir.
2. For soffit size see details
3. For spans and dimensions refer to floor plans
4. Trusses are to be an approved truss design from the truss manufacturer's engineer.
5. Use Simpson H-1 hurricane anchors at each truss or rafter to wall connection.
6. Solid blocking required between joists, rafters, and trusses over all bearing walls. Such blocking shall be 1 1/2" minimum thickness and full depth of joists, rafters, or trusses.
7. Minimum header sizes shall be according to the header size table unless otherwise noted.
8. Basis of design roof live/snow load of 20 psf, and roof dead load of 15 psf.
9. Plywood roof decking to be Min 1/2" thick, 24/0, CDX or .5/8 walls

WALL FRAMING SECTIONS

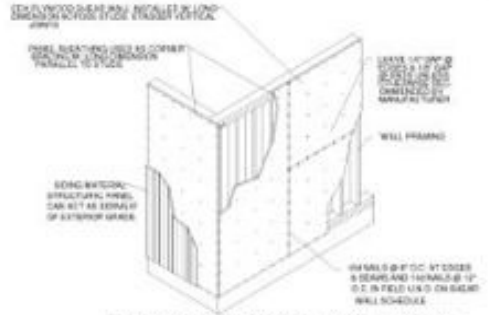
SCALE 1/8"=1'



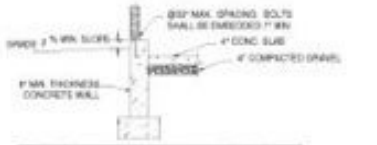
HRAND straps for all (ABWP) Alternate Braced Wall Panels
See additional detail for all (BWP) Braced Wall Panels

TYPICAL ALTERNATE BRACED WALL PANEL (ABWP)

NOTE: TYPICAL DETAILS FOR CONSTRUCTION TO MEET BUILDING REQUIREMENTS. SHEDS TO BE BUILT AS PER LOCAL CODE REQUIREMENTS

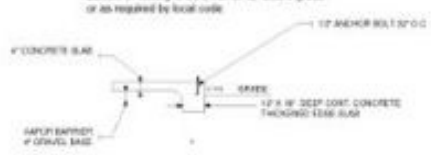


TYPICAL BRACED WALL PANEL (BWP)

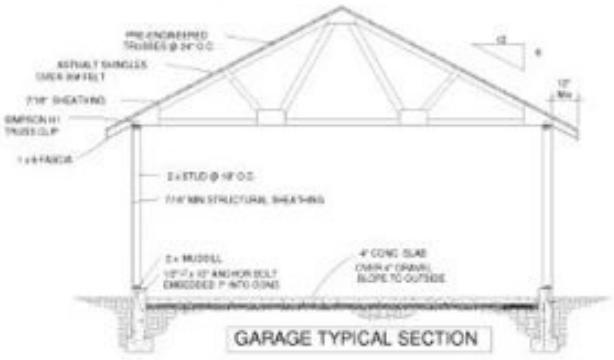


Footing and concrete wall option

Bottom of footing to be a min of 12" below grade or as required by local code



Monolithic slab foundation option


PRE-ENGINEERED TRUSSES @ 24" O.C.
ASPHALT SHINGLES OVER 30# FELT
7/16" SHEATHING
SIMPSON H1 TRUSS CLIP
1 x 6 FASCIA
2 x STUD @ 16" O.C.
7/16" MIN STRUCTURAL SHEATHING
2 x MUDSILL
1/2" x 10" ANCHOR BOLT EMBEDDED 7" INTO CONC.
4" CONC. SLAB OVER 4" GRAVEL SLOPE TO OUTSIDE

GARAGE TYPICAL SECTION

General								
GN1		1	60 high wall	Ketag 4	47	0	ft	
GN2		1		heated ceiling area	140.00	0.00	sq ft	
GN3		1		heated floor area	140.00	0.00	sq ft	
GN4		1		heated wall area	347.00	0.00	sq ft	
GN5		1		heated glass area	8.33	0.00	sq ft	
GN6		4	28 1/4 high wall	Sliding 4	1.8	0	ft	
								Subtotal
Subfloor								
SF1		1	4'x8'x3/4"	Sheet Plywood	4	0		
SF2		1	2x8" 12'	rim joists - lumber	4	0		
SF3		1	2x8" 16'	rim joists - lumber	6	0		
SF4		1	2x8" 10'	floor joists - lumber	8	0		
								Subtotal
Framing								
F1		1	2x4 <Blk>	fir plate	140	0	ft	
F2		1	2x4" 60 1/2"	fir stud	53	0		
F3		1	2x4 <Blk>	fir stud stock	67	0	ft	
F4		1	2x6 <Blk>	header - lumber	16	0	ft	
F5	2		2x4 <Blk>	fir stud stock	22	0	ft	
F6	2		2x4 <Blk>	fir plate	56	0	ft	
								Subtotal
Siding								
S1		1	8" wide	Siding: Vertical Gray	310	0	ft	
S2		1	4'x8'x1/2"	Sheet: Plywood-Ind	12	0		
S3		1		house wrap	372.00	0.00	sq ft	
S4	2		8" wide	Siding: Vertical Gray	53	0	ft	
S5	2		4'x8'x1/8"	Sheet: Plywood-Ind	1	0		
								Subtotal
Ext Trim								
EX1		1	10x36 in	shutter	4	0		
EX2		1	1x4 <Blk>	exterior sill - color: white	5	0	ft	
EX3		1	1x4 <Blk>	ext. window casing - color: white	18	0	ft	
EX4		1	1x3 SP	door threshold	1	0		
EX5		1	1x4 <Blk>	ext. door casing - color: white	17	0	ft	
EX6		1	3 in	ext. door jamb - color: white	17	0	ft	
EX7		1	1x4 in (E)	corner board - color: white	31	0	ft	
								Subtotal
Roofing								
R1		1	2x8" 16'	ridge board - lumber	1	0		
R2		1	2x8" 16'	rafters - lumber	3	0		
R3		1	2x8" 16'	rafters - lumber	39	0	ft	
R4		1	2x4" 16'	rafters - lumber	23	0	ft	
R5		1	TPO-E 100"	roof truss	8	0		
R6		1		ridge cap	1.5	0	ft	
R7		1		Roofing: Dimensional Comp	144.00	0.00	sq ft	
R8		1	4x8 sheets	roof sheathing	6	0		
R9		1	2x6"	gable fascia	23	0	ft	
R10		1	2x6"	eave fascia	31	0	ft	
R11		1		metal drip edge	58	0	ft	
								Subtotal
Insulation								
IN1		1	12x24x48" batts	ceiling insulation	17	0		
IN2		1	12x24x48" batts	floor insulation	17	0		
IN3		1	4x24x60" Batts	wall insulation	21	0		
								Subtotal
Flooring								
FL1		1	2 1/4" wide	Flooring: Oak-Golden	864	0	ft	
Wall Sid								
WD1		1	4'x8'x1/2"	Sheet: Sheetrock	12	0		
WD2		1		Color: Bone White	124.00	0.00	sq ft	
WD3		1	4'x8'x3/4"	Sheet: Sheetrock	4	0		
WD4	2		4'x8'x1/2"	Sheet: Sheetrock	1	0		
								Subtotal
Windows								
W1		1	24x36	double hung	3	0		
Doors								
D1		1	Master 3/4Ft	ext. 6 Panel - color: cocoa	1	0		
D2		1		handle: Lever (decorative)	1	0		
D3		1		handle: Exterior Handle (ext.)	1	0		
D4		1		lock: Deadbolt (ext.exterior)	1	0		
D5		1		lock: Deadbolt (ext.exterior)	1	0		
D6		1		hinge: hidden	3	0		
								Subtotal
ext Trim								
T1		1	1x4 <Blk>	window apron	5	0	ft	
T2		1	1x4 <Blk>	sill	5	0	ft	
T3		1	1x4 <Blk>	interior casing	38	0	ft	
T4		1	1x6 <Blk>	frieze molding	48	0	ft	
								Subtotal
								Total

Construction documentation is provided for reference purposes only. Contractor is responsible for verifying all dimensions and conditions prior to construction. Contractor is responsible for coordinating all trades and ensuring compliance with applicable codes and regulations.

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Residential Design

Portable Chicken Coop Plans

DISCLAIMER:

These drawings are intended for use as a GUIDE ONLY!

Basic construction methods still apply! I.E. "Measure twice, cut once". Measure all dimensions, ensure edges are flush and uprights and supports are level as can be.

ALWAYS wear any safety equipment and follow proper safety methods to prevent injury! Working at heights CAN result in severe injury, including falls from small heights!

Feel free to use your own methodology! The methods in this plan set do not necessarily reflect your personal knowledge or skill level! You may opt to construct the structure shown using your own tools and methods!

We WILL NOT accept liability for any reason, build assumes ALL RISKS ASSOCIATED WITH CONSTRUCTION! Work safely, wear proper protection (including ear and eye protection) and if you feel at all uncomfortable with any aspect of construction, contact a professional!

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MATERIALS		
Description	Dimensions	Quantity
2x4 plank	2x4x8'	20
2x4 pressure treated plank	2x4x10'	2
Plywood Sheathing	4x8'x$\frac{1}{2}$" min.	4
2x2 post	2x2x8'	8
2x4 pressure treated plank	2x4x12'	2
Miscellaneous (By Builder)		
Angle Brackets		12
90° Metal Ties		4
Roofing		
Epoxy (or equal) sealant		
Window		
Chicken wire		
Fasteners Paint, siding, veneer, etc.		

To begin, start by cutting and laying out the 2x4 pressure treated planks as shown in the diagram below.We show the fasteners as 90° Simpson fasteners

Notes:

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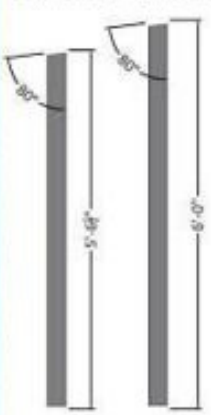
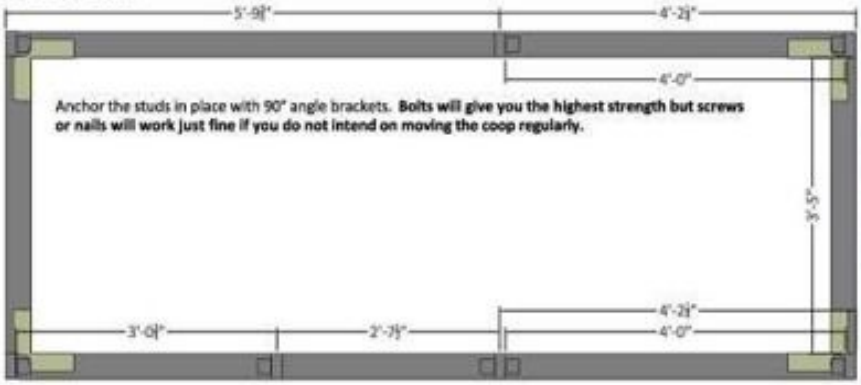
Specialized Design Systems

Once you have the base plate constructed, you will need to cut your studs as shown in the diagram below. Layout and place the studs as shown. You will need 4 of the taller studs and 3 of the shorter studs.



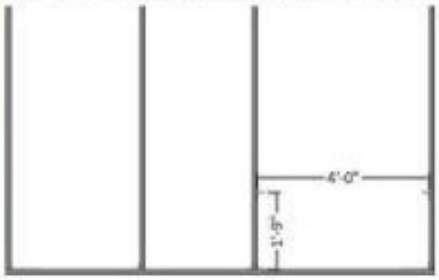


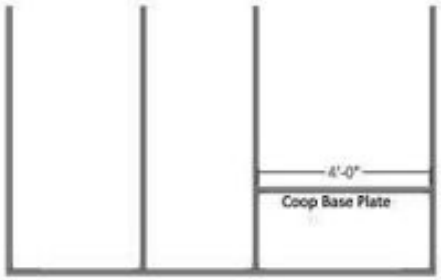
Anchor the studs in place with 90° angle brackets. Bolts will give you the highest strength but screws or nails will work just fine if you do not intend on moving the coop regularly.

Notes:

SDS-CAD
Specialized Design Systems

For the floor planks, use angle brackets as placed in the diagrams below. Place your coop base planks on and bolt or screw into place.





SDS-CAD
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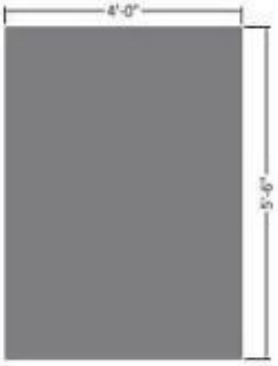
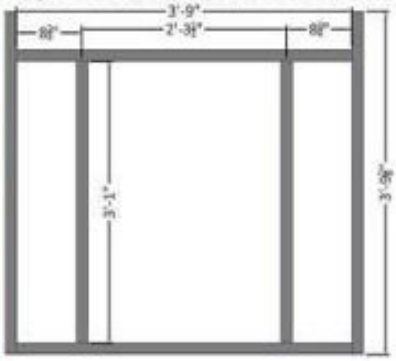
Use a 4x6'x¾" plywood sheet for the floor. We recommend using oak or cedar plywood because of their water-resistance properties.



Notes:

SDS-CAD
Specialized Design Systems

Now you can start construction of the front wall frame. You will need to put an access in so you can get in and clean out the coop once in awhile.

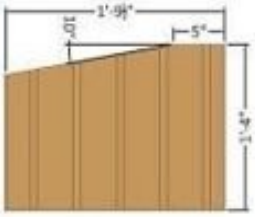


Inset the framing the thickness of your wall sheathing. If you use ½", inset the frame ½".

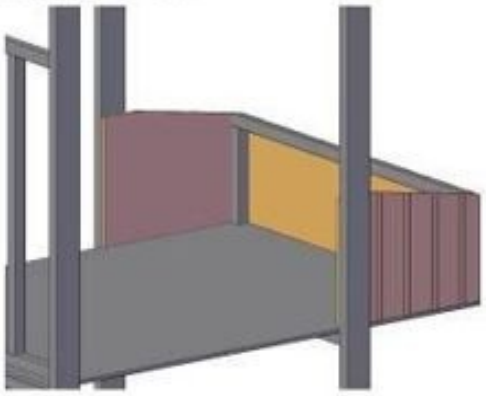
Notes:

SDS-CAD
Specialized Design Systems

Follow the diagrams below to construct the nesting box framing. Miter the 2x2 nesting box top plate as shown.



Cut the nesting box side sheathing as shown at left. The sheathing will attach to the inside of the coop uprights and on the outside do the nesting box rear frame. See the diagrams.



Notes:

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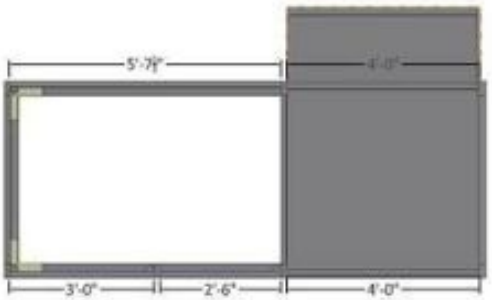
Specialized Design Systems

Measure and install the top plates around the frame. Ensure the studs are vertical with a level. Don't forget! Inset the COOP top plates the thickness of your sheathing material! Layout your cuts BEFORE making them! Always re-measure for accuracy!



Notes:

SDS-CAD
Specialized Design Systems

Now for the sheathing...Remember, cut your sheathing so it is inset between the uprights. Follow the diagram below. Keep the center piece of the main access for the door frame.

Notes:

SDS-CAD
Specialized Design Systems

Now, before you sheath the last wall, you will want to do some quick framing. Start with a nailer at the bottom. The nailer should cross the open span from the nesting box walls, NOT the side walls.

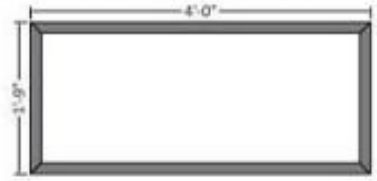
Then you need to frame for the sheathing. The framing will be slightly offset from the base plank. You will use the base plank to attach hinges for the nesting box access so you want the plank offset to give you a nailing surface.

Enclose the coop. Make sure the sheathing is inset between the uprights.

Notes:

SDS-CAD
Specialized Design Systems

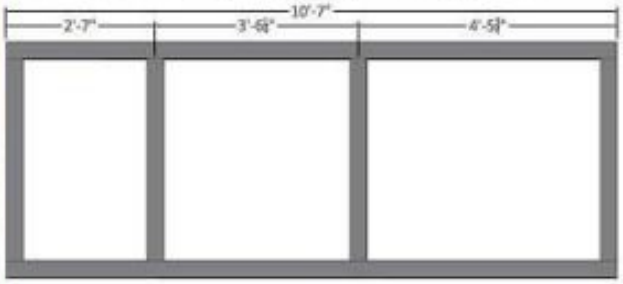
OK, now you need to start on the run. Frame in beneath the coop by making smaller frames that will fit beneath the coop. They are relatively simple compared to what you have already completed. Follow the diagrams below, measure carefully and you shouldn't have any problems.



Notes:

SDS-CAD
Specialized Design Systems

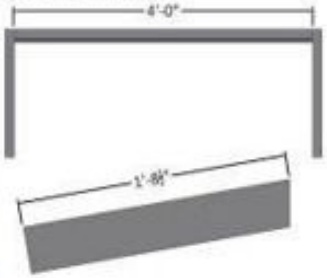
You will want to construct a top plate to tie the top of the coop together. Measure the cross braces before installing in place.



Notes:

SDS-CAD
Specialized Design Systems

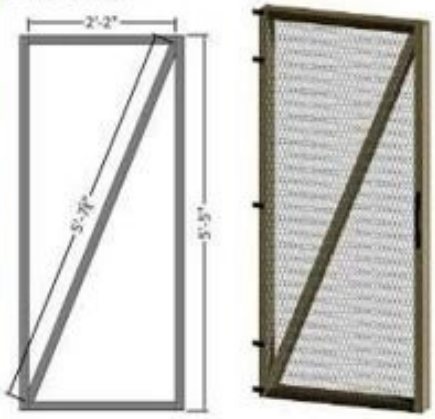
Frame around the roof of the nesting box and attach some plywood as insulation. Always re-measure lengths before cutting! Ensure the frame will swing properly when in place.



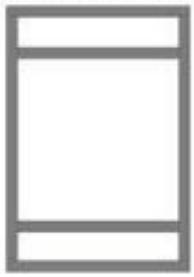
Notes:

SDS-CAD
Specialized Design Systems

Frame in the coop access and apply chicken wire around the coop. Layout the door frame and cut carefully. Mark the cross brace while in place to ensure the cuts are correct.



Frame in the coop door as shown below. The actual dimensions may vary depending upon wether you desire a window and/or window size.



Notes:

SDS-CAD
Specialized Design Systems

Complete the roof with the roofing of your choice. Make sure to seal the roofing so rain and snow can't intrude.

To finish off the coop, don't forget the chicken access panel to lock the coop up at night and the ramp to allow the chickens to get down! For the access panel, take some scrap 2x2 and rip out a dado slightly bigger ($\frac{3}{8}$" - $\frac{1}{2}$") than the panel material. Anchor the slides to the access wall (with the panel in place).

For the chickens to get into the coop, you need to build a very simple ramp. Simply take a scrap plank and attach 12" 2x2 "steps for the chickens to climb.

Notes:

SDS-CAD
Specialized Design Systems

Videos on how to build this portable chicken coop

Video 1 How to build the portable chicken coop
http://www.screencast.com/t/B82PphpuOu2X
Video 2 How to build the portable chicken coop
http://www.screencast.com/t/bscO8lJ0M
Video 3 How to build the portable chicken coop
http://www.screencast.com/t/cEyovgMB5i

More Portable Chicken Coop Plans

The following plans will be harder to read on the kindle book because of the small print. But links are provided to download the full PDF in high resolution to be able to zoom and print larger versions of the plans.

The following plans were commissioned and drawn by Jeffrey Guptil of 3 Dimensional Concepts.

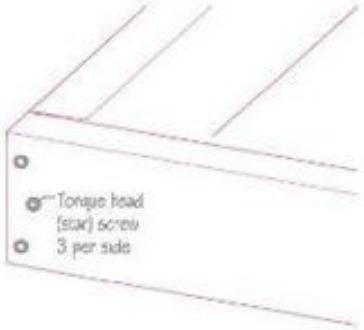
Link to Download **Portable chicken coop**

1) Image shown with green tin roof and stained white pine.
2) These plans are intended as a guide ONLY! Feel free to make changes, adjustments and revisions to suit your requirements.
3) We do not assume to know the size and type of fowl being housed in the coop. Adjustments may be necessary on a project-per-project basis.
4) This coop is large enough for approximately 10-15 chickens. Geese, turkey and other fowl will require revisions.
5) Always use safety equipment and safe construction practices! We will not be held liable for any personal injries that may occur.

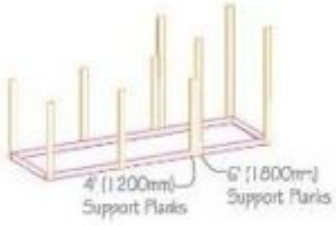
Material List

Description	Dimensions mm	Dimensions imp/inch	Quantity
Base			
Base & Sill Plank	45x90x3600	2x4x12'	4
6' Base Support Plank	45x90x1800	2x4x6'	4
4' Base Support Plank	45x90x1200	2x4x4'	6
Sill Brace	45x90x3600	2x4x4'	2
Nesting Box			
Nesting Box Plank	45x90x2400	2x4x8'	2
Nesting Box Brace	45x90x2400	2x4x4'	1
Nesting Sill Plank	45x90x2400	2x4x4'	4
Nesting Support	45x90x2400	2x4x4'	2
Plywood Sheets	1200x2400x19	4x8x¾"	7
Roost and Box Fronts	45x90x2400	2x4x4'	3
Windows			
Exterior Frame	45x90x2400	2x4x8'	2
Interior Frame	45x90x2400	2x4x8'	1
Pane Material	By Builder	By Builder	4
Mesh	By Builder	By Builder	1
Glue, Epoxy, Etc.	By Builder	By Builder	Varies
Hinges	By Builder	By Builder	8
Roofing			
Rafters	45x90x2400	2x4x8'	3
Purlins	45x90x2400	2x4x4'	16
Access Planks	45x90x2400	2x4x4'	2
Sheathing	1200x2400x19	4x8x¾"	3
Glue, Epoxy, Etc.	By Builder	By Builder	Varies
Hinges	By Builder	By Builder	8
Miscellaneous			
Handles	By Builder	By Builder	4
Veneer/Siding	By Builder	By Builder	100 sq. ft.
Wood Sealant	By Builder	By Builder	2 Gallons
Paint	By Builder	By Builder	2 Gallons
Screws	#20-30x40mm	#20-30x 2"	150 Min.
Shingles/Tin Roofing	If Desired	If Desired	1 Box Min.

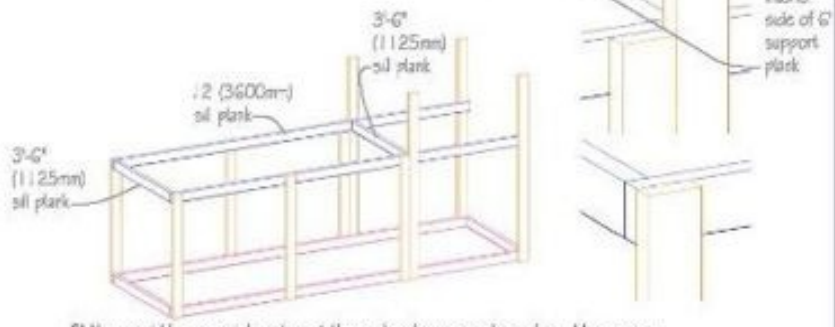
1) To begin, cut the two (2) base planks and the two (2) end planks as dimensioned below. Remember, these should be treated or sealed to prevent water damage!.
2) Layout planks as diagrammed below on a smooth, level surface.
Attach with three (3) - #20-#30x1 ½" (40-50mm) star (torque) head screws each.



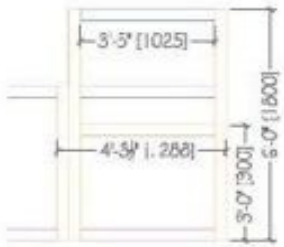
3) Cut four (4) base support planks at 6'-0" (1800mm) and six (6) base support planks at 4'-0" (1200mm).
4) Attach them to the base sill as diagrammed below. Follow the drawings and you should end up with something that looks like the diagram in the upper right below.



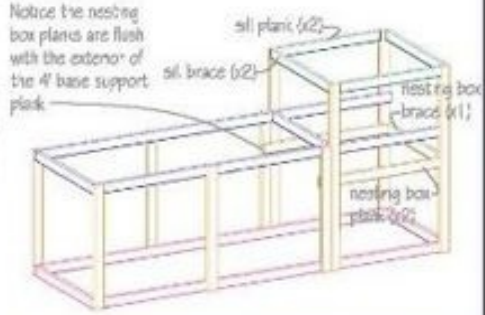
5) Now we need to attach some top sill planks to give the structure some rigidity. Start by attaching a 12' (3600mm) plank on the interior top of the 4' (1200mm) base support planks. Be sure the planks are FLUSH with the top, not on the top of the structure (as diagrammed). Use a level to ensure the planks stay level and attach starting at the 4' (1200mm) end working toward the 6' (1800mm) end. Repeat with opposing plank.
6) Add a 3'-3" (1125mm) bracer plank flush with the edge of the 6' (1800mm) base support plank (see diagram).
7) Add another 3'-6" (1125mm) bracer plank across the top from edge of the 4' (1200mm) side. **Be sure to leave the rear open for access to the nesting boxes!**



8) Now would be a great time to get the nesting box supports in place. Measure as diagrammed below and cut two (2) nesting box supports and one (1) nesting box brace.
9) Now we need to brace the top. Measure and cut the coop sill planks as diagrammed. Cut two (2) sill braces and two (2) sill planks.



Notice the nesting box planks are flush with the exterior of the 4' base support plank



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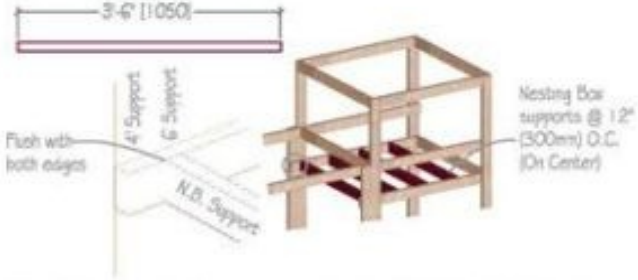
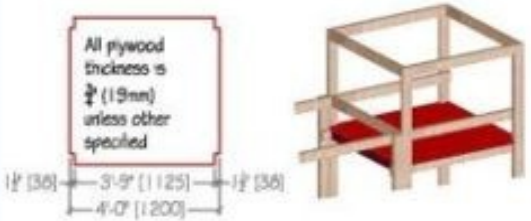
Title: Base Details	Drawn: JSG	Approved:
	Revision: 0	Drawing:
Date: 23-Jun-09	Scale: Specified	

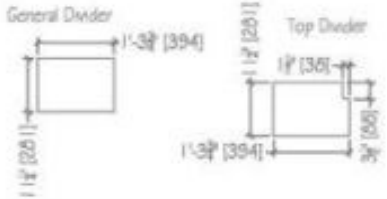
1) Now that the structure is almost complete, you need to begin work on the nesting box. The nesting box will be the place the chickens (or other applicable fowl) can go to escape weather and lay eggs. Before we get too far along, we need some support for the nesting box base sheathing.
2) To begin, measure and cut five (5) support planks. Be sure to measure the length carefully as these will go in between the nesting box supports that we added to the structure earlier (see diagrams below)



3) To make the nesting box base, use a jig saw to cut a 4'x4' (1200x1200mm) sheet of plywood as detailed below. Save the other half sheet for the nesting box platforms. Slide the sheet into the nesting box at an angle and simple "lay" it on top of the supports. Attach to supports with #20-#30x1½" (35-50mm) torque (star) head screws.
NOTE* We recommend using a fiberglass or other waterproof flooring on top of the base plywood for easy cleanup and to prevent damage. If flooring will not be applied, a coat of polyurethane or other sealant would be a good idea!



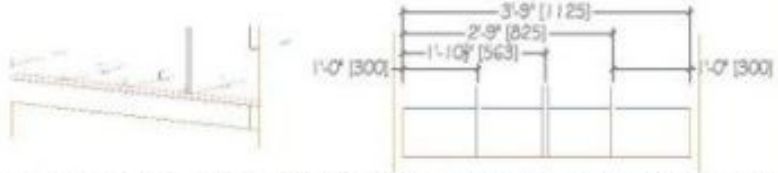
4) Layout and cut dividers as shown below. There should be six (6) general dividers and three (3) top dividers (see diagrams below). Set these aside for now.



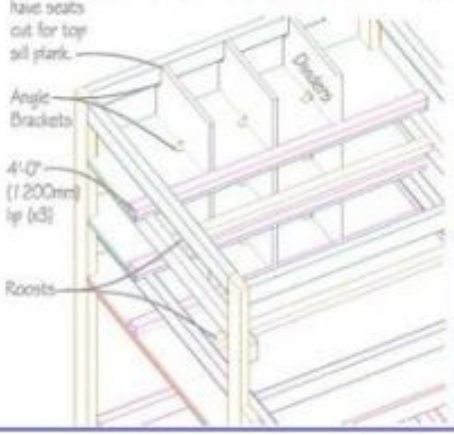
5) Layout and cut 2 nest platforms from the remaining 4'x4' sheet of plywood left over from the nesting box base sheathing as diagrammed below. Once cut set aside.

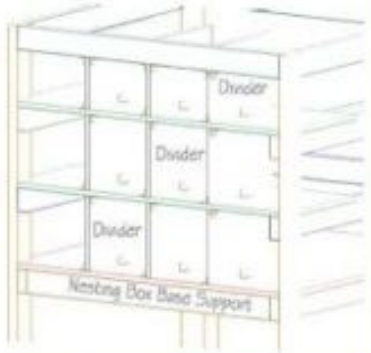
All plywood thickness is ¾" (19mm) unless other specified

6) Use angle brackets to set the first row of nesting box dividers (see diagram). The diagram below should be used as a guide for spacing. Fowl sizes vary and spacing dimensions may need to be adjusted!



7) Now, carefully place a nesting platform on top of the bottom row of dividers. Use a level to make sure the dividers below are level vertically and attach to the platform with screws. The platforms should sit on the supports (see below).
8) Repeat steps 6 and 7 for the remaining two (2) rows. **Make sure the top row of dividers is flush with the rear wall of the coop.** The dividers should fit right under the top sill. Again, attach all dividers with angle brackets (see diagram) below. The nesting boxes should make a pattern of four (4) wide and (3) three tall.
9) If you have a table saw, rip 3 4'-0" (1200mm) 2x4 (25x90mm) into six (6) sections lengthwise. Use half of them on the front of the nesting boxes to form a lip to contain straw (see diagram). ***Note: A 1½" (35mm) dowel will also work.**
10) Use 2 of the remaining pieces as roosts. Attach these to the nesting box supports to make two (2) roosts. You may use the third piece as another roost (locations by builder).





3D imensional concepts

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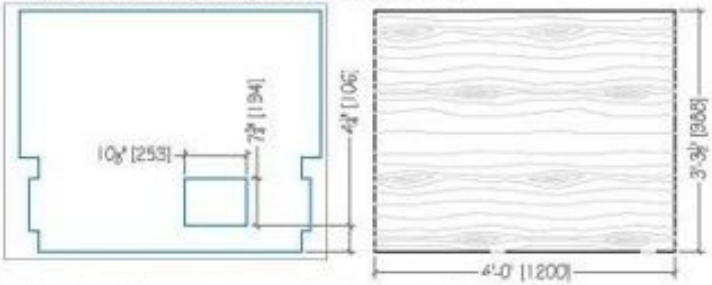
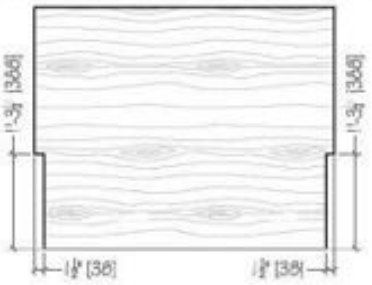
Title: Nesting Box	Drawn: JSG	Approved:	
	Revision: 0	Drawing: 2	
Date: 23-Jun-09	Scale: Specified		

At this point, the structure should look something like the diagram below.
1) The next step will be to enclose the coop before we finish the structure with the roof.

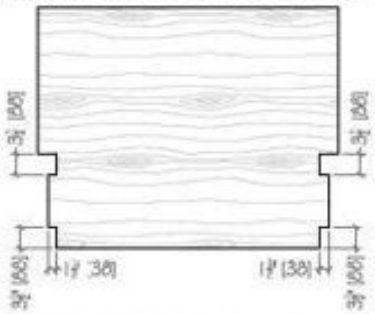
2) The piece below may look scary, but anyone with some jigsaw skills should be able to cut it out in about 5 minutes. Start by cutting the overall dimensions shown.



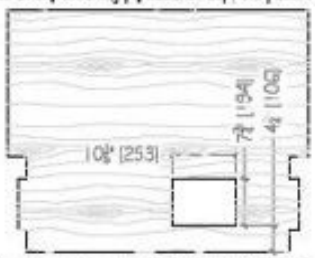
3) Next, layout the lower cut as shown below. Use a jigsaw or table saw to cut.



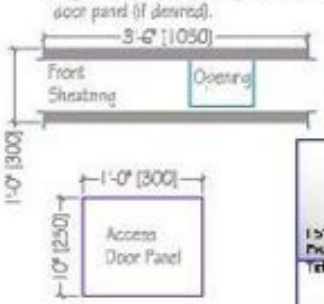
4) Now, use a jigsaw to cut out the seats for the supports. Layout the sheet as detailed below.

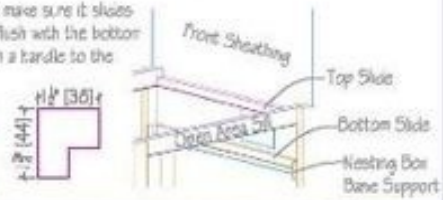


5) At this step, all that is left of the front sheathing is the access to the coop. Layout the door CAREFULLY! Draw the lines so you can clearly see the entire shape of the access hole. **Make sure to include the width of any differing plywood or support plank thickness.**



6) Use a table or circular saw to rip a 4" (1200mm), 2x4 (45x90mm) in half lengthwise.
7) Use a router to create two (2) doors slides. Attach the bottom slide flush with the nesting box base support as shown below. Be sure to router JUST OVER ¾" (19mm) to allow the door to slide easily!
8) Place the door panel in the slot and make sure it slides easily and freely. Attach the top slide flush with the bottom edge of the open area sill plank. Attach a handle to the door panel (if desired).





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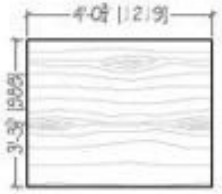
Title: Front Sheathing	Drawn: JSG	Approved:
	Revision: 0	Drawing: 3
Date: 23-Jun-09	Scale: Specified	

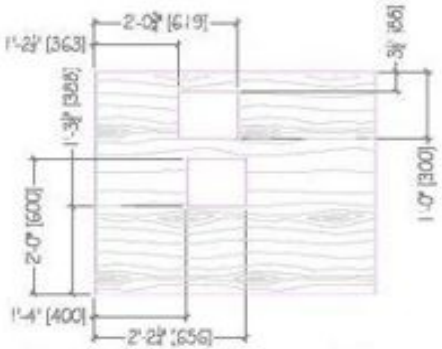
Now we need to work on the windows. These instructions will cover both a very general window to let light in, and a very nice and functional window. Both windows will require a bit of planning ahead. First, the builder needs to determine what kind of window they need. The windows in these instructions will both double as vents. Second, the materials the windows will be made of will NOT be assumed in these instructions. We will make recommendations based upon strength of materials and types of weather, temperatures and types of fowl.

1) Begin by cutting two (2) sheets of plywood as dimensioned below.



2) Use a jigsaw to cut out the windows in each side. Layout the design with pencil and cut out the squares.Be sure to drill pilot holes to prevent bending and/or breaking the blade.

***NOTE: IF a basic window is desired, keep the cut outs for window covers!**



For those who do not require or desire to input more effort than is necessary, a very basic set of instructions is below. **These are VERY basic and do not reflect the design shown on the front.** It is a simple vent and vent cover type of window. For those building the see through style of window, skip to step 6.

3) OK, if this is all the effort the builder is willing to put into construction, cut some chicken wire or mesh and staple to the inside of all four (4) windows.

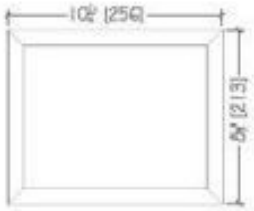
4) Attach hinges to the cut pieces and use the cut pieces as vent covers. We recommend attaching slide pins to the opening-sides of the vent covers so you can lock or open vent covers as you wish.

5) With assistance, hold the side walls against the nesting box and attach with #20-#30x1½" (35mm) torque (star) head screws. Make sure the sheathing sits flush with the top sill and both the front and rear edges.

6) If you are reading this, congratulations, you want the challenge of building your own basic windows which will add beauty and functionality to the coop design. To start, you will need the 1x4 (25x90mm) planks listed on the materials sheet. We are going to start with the exterior frame.

7) Use a table or circular saw to CAREFULLY rip the 1x4 (25x90mm) planks lengthwise.

8) Layout and cut eight (8) top and bottom pieces and eight (8) side pieces to length. Use a miter saw to cut the ends off at 45°. BE CAREFUL TO MITER THE ENDS THE CORRECT WAY!

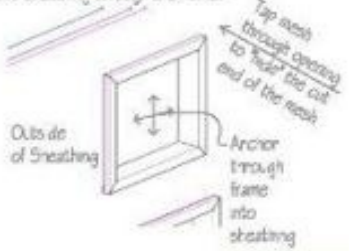


Chicken wire, mesh fabric, fencing, etc (by builder)
Use construction staples to fasten edge of mesh about half-way over sides of frame

9) Attach two (2) short and two (2) long pieces to form the frame pictured above. Slide the frame into one of the holes in the sheathing and make sure it slides loosely. Note: These drawings are very precise and you may need to sand the edges of the frame and the interior edges of the holes a small amount to get the frame to fit!

10) Cut a sheet of mesh so it is just big enough to fold around the back and over half of the sides of the frame (as detailed above). HINT: Lay a large piece of mesh material (by builder) over the rear of the window, staple the mesh down to the frame and cut with scissors, wire cutters, etc (by builder).

11) With a dead-blow hammer or soft mallet, gently tap the frame with the mesh into one of the openings in the nesting box sheathing. Make sure the mesh end goes in FIRST and try to cover the mesh with the inside edges of the hole in the sheathing. HINT: If you don't have a dead-blow hammer or soft mallet, use a piece of soft scrap and gently tap around the corners. Anchor the frame into the sheathing through the frame.



12) Repeat steps 9-11 for the remaining three (3) frames.

3D imensional concepts

Title: Side & Windows	Drawn: JSG	Approved:
	Revision: 0	Drawing: 4
Date: 23-Jun-08	Scale: Specified	

Now that the frames are complete and they each have a protective mesh around them, it is time to build the actual windows. Up to this point, the coop should look something like this:

Again, windows require a decent amount of construction aptitude. Use extreme caution, double check all measurements, use protective measures when cutting, routering or ripping small pieces!

1) Use a table or circular saw to rip a 1x4 lengthwise in half and then in half again. The resulting frame pieces should be about $\frac{3}{4}$"x$\frac{3}{4}$" (22x19mm). **Always use a guard and a push-stick when ripping small dimension pieces! Use EXTREME caution!** Depending on availability, square dowels the same approximate sizes may be available at your local hardware or lumber supplier. **Adjust measurements accordingly if purchasing small dimension pieces!**

2) Use a router or table saw to gouge the thickness of the window material out of the center of each piece. We recommend at least $\frac{1}{4}$" (6-7mm) glass inset (see isometric below for an example). **Pane materials may vary and is by builder.**

3) Cut eight (8) long pieces and (8) short pieces as detailed below. **This is one of the few times, where extreme accuracy counts.** If you cut a piece too long, it will not close. Too short, and there will be a draft. We have allowed a total of $\frac{1}{16}$" (1-2mm) clearance on all sides in these details. **Builder WILL have to adjust lengths slightly to ensure the glass frames will open and close freely!**

Gouge out the center of each piece BEFORE cutting to length. This will ensure the groove in the frame is flush.

4) Cut or purchase four (4) panes as shown and assemble frame pieces around each pane to ensure a good fit. **Be sure the frame fits snugly around the pane before gluing frame ends together and sealing glass inside frame! Builder may need to adjust dimensions depending on pane size, thickness, and material.**

5) Make sure the assemblies will fit in the frames and swing freely, label each if necessary! (HINT: To do this, drill and screw the frame together. Make sure each piece is flush and even (use the pane as a guide if desired). Check for fit with the assembled frame. (You **REALLY DO** want to check for fit before you have an assembled and sealed window that will not fit or open!)
6) This step is **NOT REQUIRED** but it is **RECOMMENDED** for longevity! **IF** all pieces fit snugly around each pane **AND** fit easily into the window frame **AND** will swing freely, apply an exterior coat of polyeurthane or equivalent sealant to the outside edges of the frame.
7) Apply a layer of epoxy or silicone sealant inside the grooves on the pieces of frame and CAREFULLY assemble frame around the pane. Glue AND tack the ends of the frame pieces to each other with wood glue and screw straight down into each corresponding piece. Use a rag to wipe away any glue and/or sealant that runs onto the pane before it dries. Clamp and let dry.
8) The completed window assembly should look something like the diagram below.

9) Attach hinges to the exterior of the frame. Use shims to center the window in the frame and hinge the window to the window frame. The completed window assembly should look like the diagram below.
10) Repeat steps 5-9 for the remaining windows.
11) We recommend either a slide bolt or an eye hook and pin to lock the window closed.

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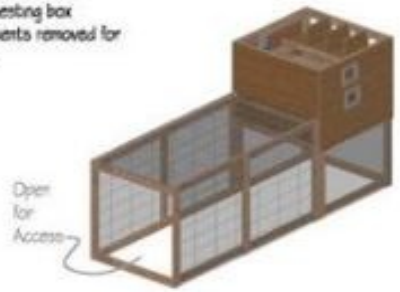
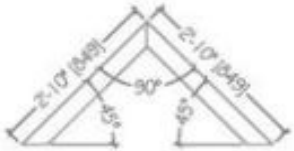
	Revision: 0	Drawing: 5
Date: 23-Jun-09	Scale: Specified	

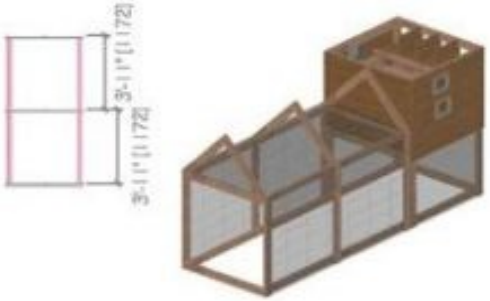
Before we finish the coop, with the roof, we need to cover the coop with some type of mesh or chicken wire. Simply unroll the wire or mesh and drape it over the open sill. Use carpenter staples to attach the open end on one side and cut the other end flush with the base of the opposing side. Wrap mesh around the bottom half under the nesting box and staple. See the diagram below for an example.



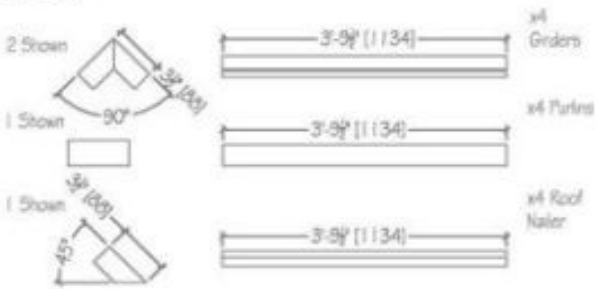
First we need to assemble the roof structure. Feel free to improvise and attach more rafters depending on the expected snow loads in your area.
1) Measure and cut six (6) 2x4 (45x90mm) planks as shown below. Assemble two (2) planks as shown to form a basic truss.



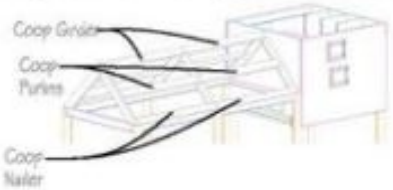
2) Place the trusses in the locations shown. Place one flush with the front, place one flush with the back, and split the difference as detailed below.



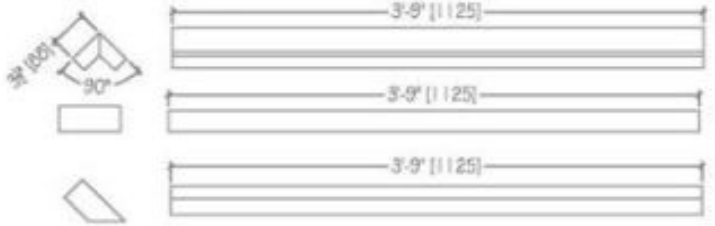
3) Cut 4 planks each as detailed below. Label them accordingly. Use a circular saw or table saw to rip planks as needed.

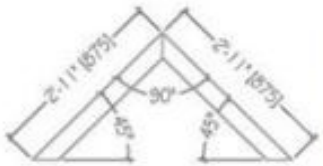


4) Assemble the roof supports as detailed below. Toenail purlins, girders and nailers onto rafters. Make sure girders connect and all supports are flush with the top edge of the rafters on both sides!



5) Measure and cut planks for the nesting box roof as detailed below. Label them accordingly. Use a circular saw or table saw to rip planks as needed. Assemble rafters as shown.





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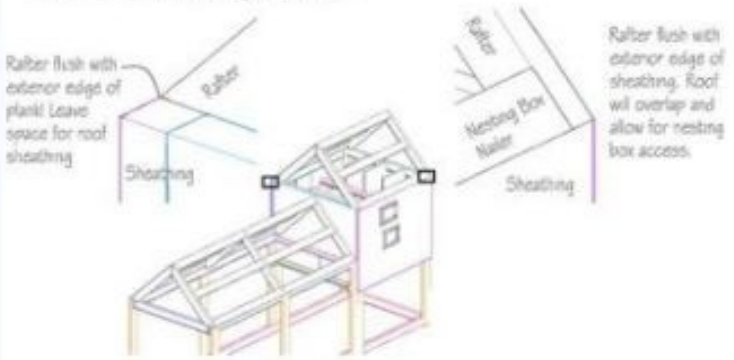
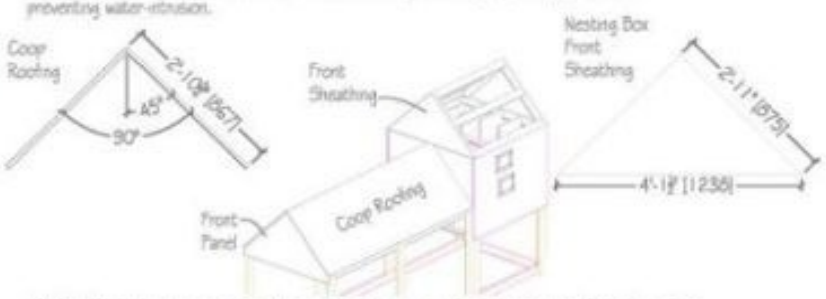
Date: 23-Jun-09	Scale: Specified	

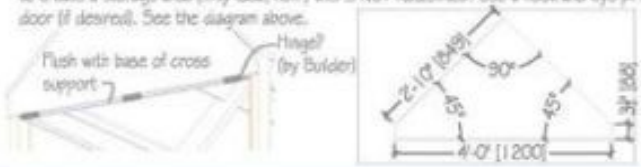
6) Assemble the nesting box roof in much the same manner as the coop roof supports. There will be no middle rafter on the nesting box, however.


Rafter flush with exterior edge of plank! Leave space for roof sheathing
Rafter
Sheathing
Rafter
Nesting Box Nailer
Sheathing
Rafter flush with exterior edge of sheathing. Roof will overlap and allow for nesting box access.

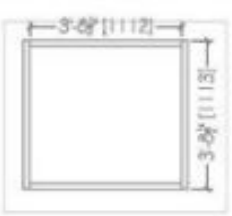
7) Now it is time to sheath the coop roof. At this point, it is really up to the builder on how they wish to complete the roof. This example will show the sheathing ripped at the crown, but if you are intending on installing tin roofing or shingles, **ripping the plywood is not necessary**. It is recommended to assist with a water-tight seal.
8) We will start with the coop roof. Cut a 4'x8' sheets of plywood to the dimensions shown. Attach the nesting box front sheathing first. Have an assistant hold it flush with the nesting box roof supports.
9) If you are intending on water-proofing with roofing, angling the edges on the coop roofing is not necessary. We would recommend mitering the long edges simply to aid in preventing water-intrusion.



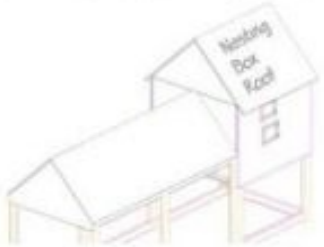
10) Cut a front sheathing piece as shown below. This piece will go over the very front face of the coop. We would recommend attaching the piece with hinges attached to the bottom of the sill plank to create a storage area (nifty idea, huh?) this is NOT REQUIRED. Use a hook and eye pin to latch the door (if desired). See the diagram above.



Now we need to enclose the open area to allow human access.
11) Rip a 8' (2400mm) plank in half lengthwise. Cut and assemble as shown below.
12) Attach mesh with carpenter staples and attach door frame to door with hinges. Placement of the hinges is up to the builder.



13) Use a hook and eye pin to latch the door closed.
14) Cut a 4'x8' (1200x2400mm) sheet of plywood into two (2) four foot sections.
15) Attach the roofing to the the supports on the nesting box in the same manner as the roofing for the coop in the previous steps (see diagram).



You will notice an overhang on this roof. This is to keep water from running down the side into the windows.

Up to this point, the coop should look like this.

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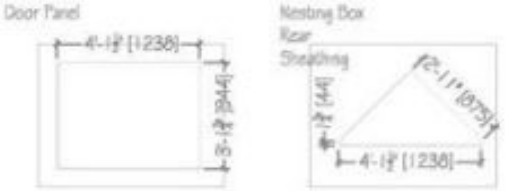
	Revision: 0	Drawing: 7
Date: 23-Jun-09	Scale: Specified	

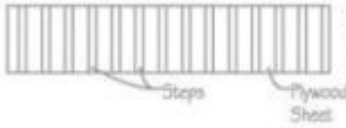
Now all that is left is to enclose the rear wall and make it so the user can get to the eggs.

1) Layout and cut two pieces of ¾" plywood sheathing as diagrammed below.



2) Attach the rear sheathing and the door panel as shown below. Hinge placement is again dependent upon the builder and the user requirements. We recommend using a slide pin or a hook and eye pin to hold the rear access shut. Make sure both sides are flush and that the roof pitch matches that of the rear sheathing.

3) Ramparts (ramps) are easily constructed with spare materials. Simply rip or cut a plywood sheet to the size of the door opening and attach scrap pieces across the top as shown below. **HINT:** We recommend attaching to the nesting box with hinges so the ramp will not blow down in wind and can easily be folded up and strapped to the top of the coop area if needed to move.



Lengths and widths may vary upon user requirements. Placement of steps may also vary!

Some points to remember:

1) We do not pretend to assume we know the size of the user's chickens or other applicable fowl. Measurements MAY need to be adjusted to suit the user requirements.

2) Attachments will generally be #20-#30 x 1½" (35mm) torque (star) head screws (unless specified otherwise).

3) Make this coop your own. Most builders can easily modify these instructions to suit a variety of needs and fowl types.

4) We do not accept any responsibility for erroneous measurements. These drawings are VERY precise and measurements should ALWAYS be double checked! Equipment types, lumber thickness and skill levels MAY vary greatly, always check measurements before cutting!

5) Veneers, paints, sealant, etc. are the responsibility of the builder! Cover image is white pine board and batten with green tin roofing.

6) Have fun with this project and, again, make it your own!

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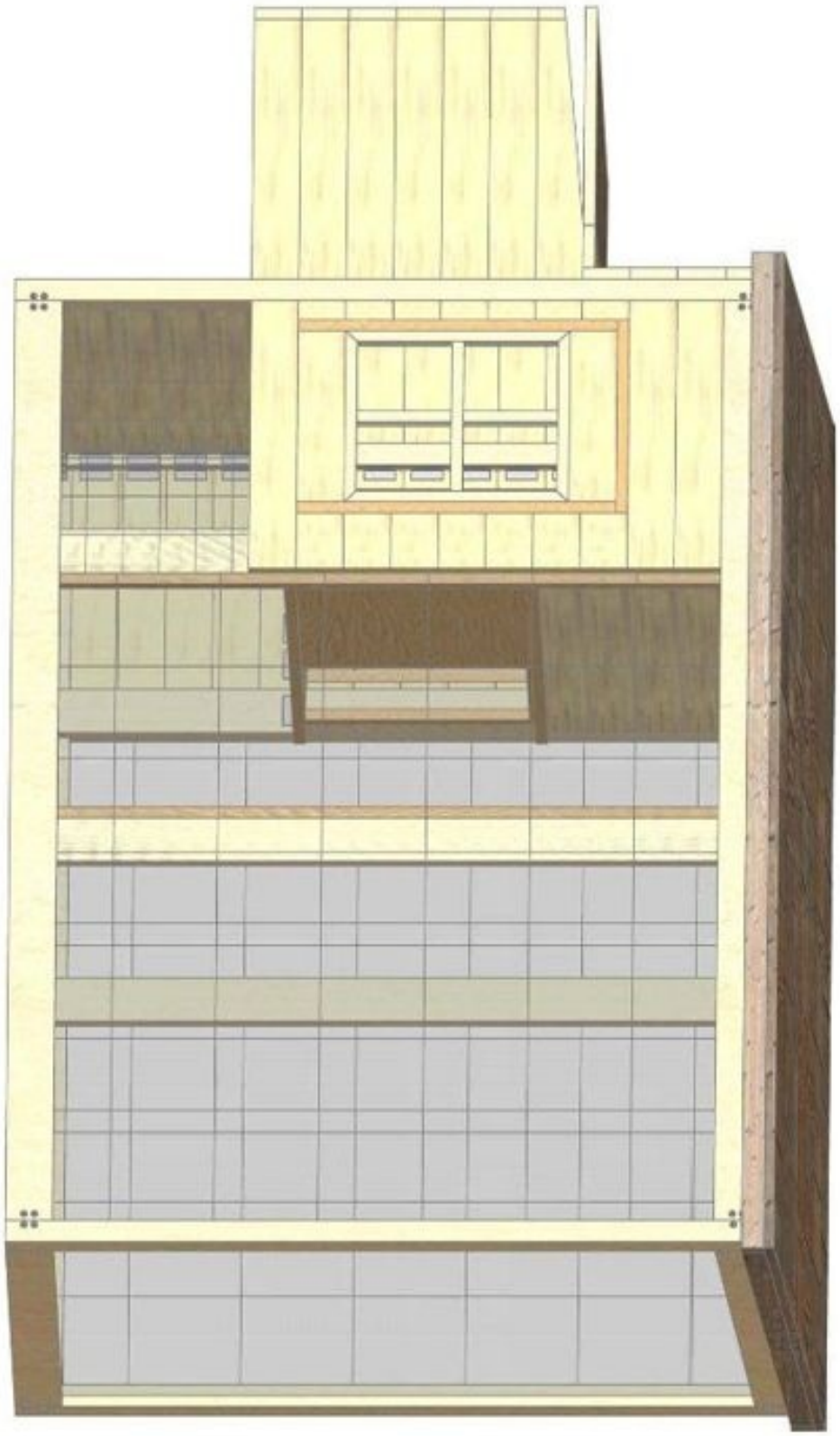
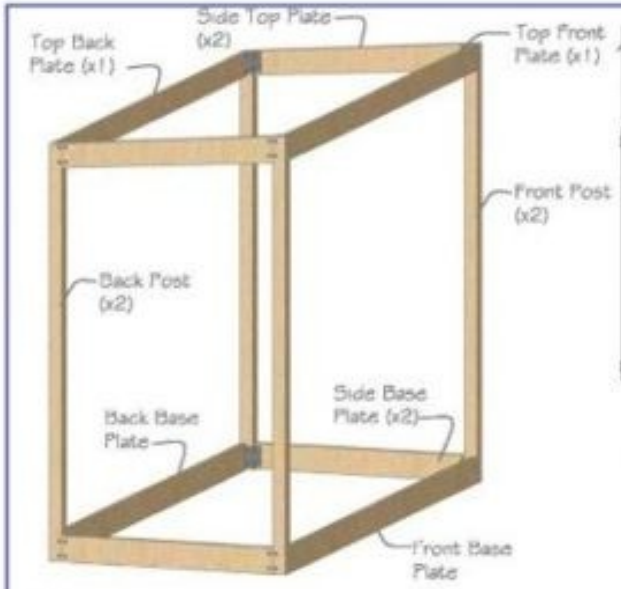
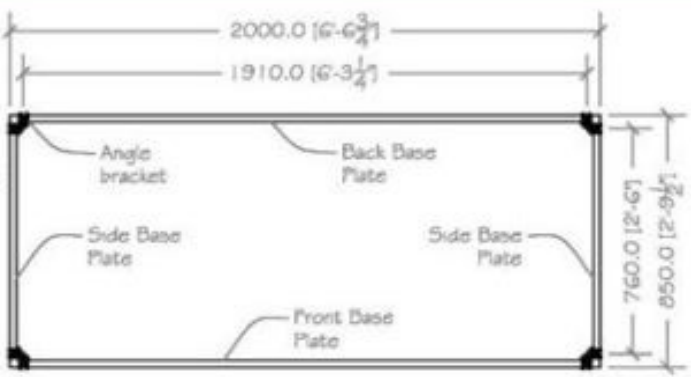
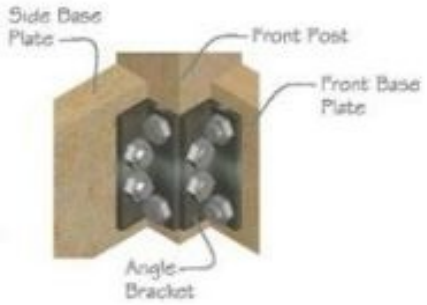
	Revision: 0	Drawing: 5
Date: 23-Jun-09	Scale: Specified	

Portable chicken coop 2



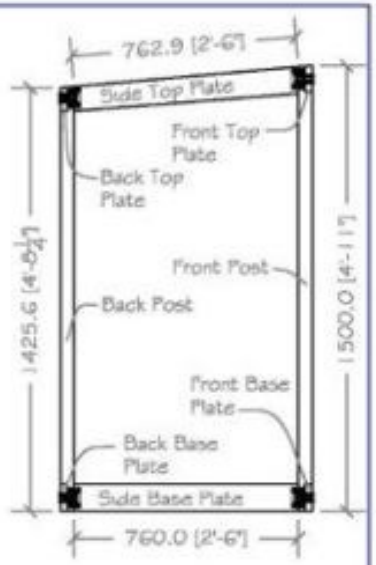






Coop Box

Scale 1:500



INSTRUCTIONS:

1) Cut Side Base Plate (x2), Front Base Plate (x1) abd Back Base Plate to length.
2) Cut Back Post (x2) and Front Post (x2) to length and cut each(4) end at a 5° angle. This angle will allow for water drainage for the roof.
3) Layout posts and plates. Connect posts and plates with angle brackets. Layout connects to ensure holes do not intersect. Also make sure the posts are level vertically.
4) Repeat for all four (4) corners.
5) Cut front and back top plates. Make sure to measure distances to ensure a proper fit.
6) Rip front and rear plates at a 5° angle to align with top of front and back posts.
7) Lay out boards for side top plates by holding boards in postion and marking ends to align with front and back posts and front and back top plates. Side top plates should sit flush with very top pf posts and front and rear top plates (see diagram).
8) Attach side plates with angle brackets. Make sure to lay out placement of holes so connections do not intersect.

Notes:
1) These drawings are intended as a construction guide.
2)Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.
3) Always measure dimensions carefully and label each piece individually.
4) Number of pieces are marked or see Material List

Material List

Description	Dimensions mm	Dimensions english	Quantity
Front Base Plate	25x90x2000	1x4x6'	1
Back Base Plate	25x90x2000	1x4x6'	1
Side Base Plate	25x90x800	1x4x4'	2
Front Post	45x45x1500	2x2x5'	2
Back Post	45x45x1500	2x2x5'	2
Top Back Plate	25x90x2000	1x4x6'	1
Top Front Plate	25x90x2000	1x4x6'	1
Side Top Plate	25x90x800	1x4x4'	2
Angle Bracket	By builder	By builder	32

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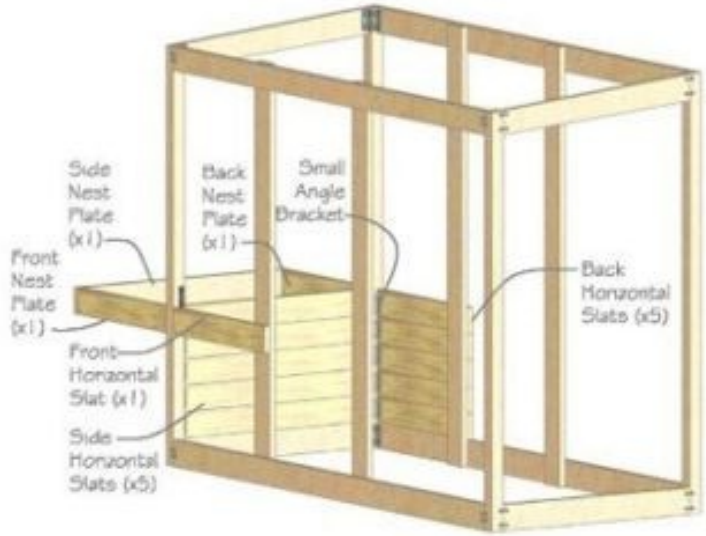
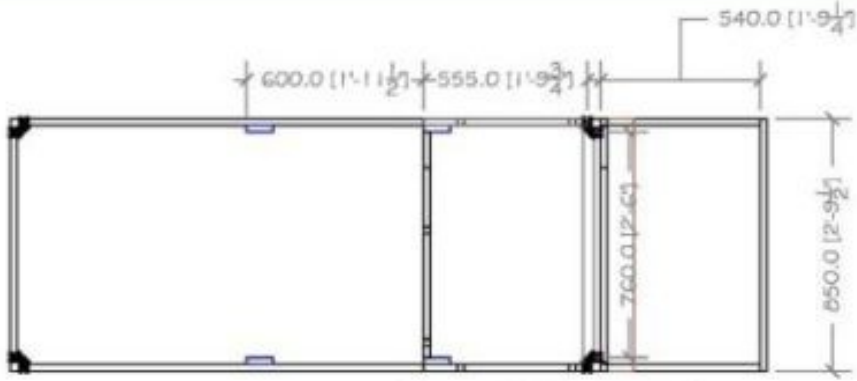
Title: Construction Detail	Drawn: JSG	Approved:
	Revision: 0	Drawing: 1
Date: 16-Jan-2009	Scale: Specified	





Vertical Support Layout

Scale 1:500

INSTRUCTIONS:

1) Once the general box frame is constructed, lay out and attach vertical supports.
2) Attach vertical supports to base plate using #20-#30x60-70mm torque screws. Make sure vertical supports are level vertically and flush with bottom of base plates.
3) Mark and cut vertical plates flush 5° with top plates.
4) Cut back horizontal slat and stack on top of back base plate. Attach to vertical support with screws. Make sure slat sits on top of base plate tightly and sits flush with side of vertical support.
5) Attach to back corner post with angle bracket and #20-#30x20-30mm torque screws. Make sure slat is flush with back edge of post.
6) Repeat steps 1-5 for remaining back horizontal slats.
7) Measure and cut side horizontal slats.
8) Attach side horizontal slats between front and back posts with angle brackets.
9) Repeat steps 7 and 8 for remaining side horizontal slats.
10) Measure and lay out location of front horizontal slat.
11) Cut front horizontal slat.
12) Tack front slat to front vertical support with #20-#30x60-70mm torque screws.
13) Attach front horizontal slat with angle bracket level to side and back horizontal slats. (See diagram) *Place a level diagonally across from side horizontal slat and mark placement of front horizontal slat to ensure front slat is level with side slat.*
14) Measure and cut nesting box base plates.
15) Attach front, back and side nest base plates with angle brackets and #20-#30x20mm torque screws. Make sure all plates are flush.
16) Cut four (4) spacers to ensure nest plates remain level while attaching to posts.
17) Use spacers, angle brackets, and M10 bolts to attach nest plates to front and back posts. (See diagram)

Notes:

1) These drawings are intended as a construction guide.
2)Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.
3) Always measure dimensions carefully and label each piece individually.
4) Number of pieces are marked below each detail.

Material List

Description	Dimensions (mm)	Dimensions (inch)	Quantity
Back Horizontal Slat	25x90x600	1x4x2'	5
Side Horizontal Slat	25x90x900	1x4x4'	5
Front Horizontal Slat	25x90x600	1x4x2'	1
Front Nest Plate	By builder	By builder	22
Side Nest Plate	25x90x600	1x4x2'	1
Side Horizontal Slat	25x90x900	1x4x4'	1
Back Nest Plate	25x90x600	1x4x2'	1
Large Angle Bracket	By builder	By builder	3

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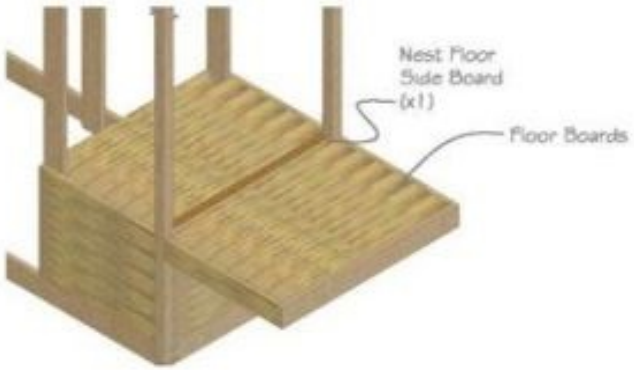
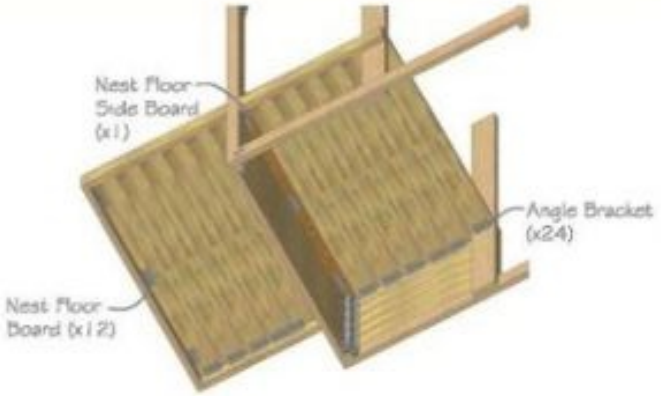
Title: Construction Detail	Drawn: JSG	Approved:
	Revision: 0	Drawing: 2
Date: 16-Jan-2009	Scale: Specified	



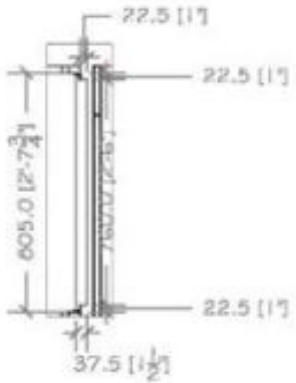
Flooring (Top View)

Scale 1:500



Flooring (Bottom View)

Scale 1:500



Nest Filler Board

Scale 1:500

Instructions:
1) Measure and cut first nest floor board to fit between vertical supports. Use small angle brackets mounted from below with #20-#30x20mm torque screws to support all nest floor boards.
2) Measure and cut floor boards and anchor between front and back horizontal slats with small angle brackets and screws. Be sure to fit boards tight against each other and that boards are flush with top of both front and back slats.
3) Measure and cut nest filler board (highlighted) to fit in space between posts (see diagram). Use small brackets and screws to anchor to side horizontal slats.
4) Continue attaching floor boards for nesting box in same manner. Attach first floor board to side horizontal slat and nest front and back plates. Attach last board to all nest plates as well.
If desired, a diagonal support can be connected to the corners of the nest plates to support the weight of the nesting box during construction.

Notes:
1) These drawings are intended as a construction guide.
2)Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.
3) Always measure dimensions carefully and label each piece individually.
4) Number of pieces are marked below each detail.

Material List

Description	Dimensions (mm)	Dimensions (english)	Quantity
Floor Board	25x90x900	2x4x4'	12
Filler Board	25x90x900	2x4x2'	1
Angle Bracket	By builder	By Builder	30

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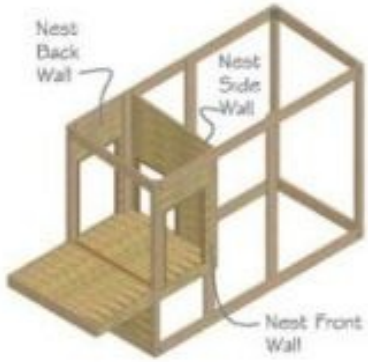
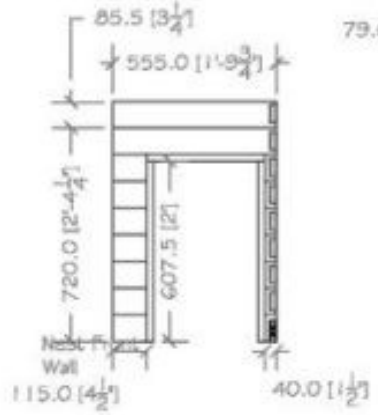
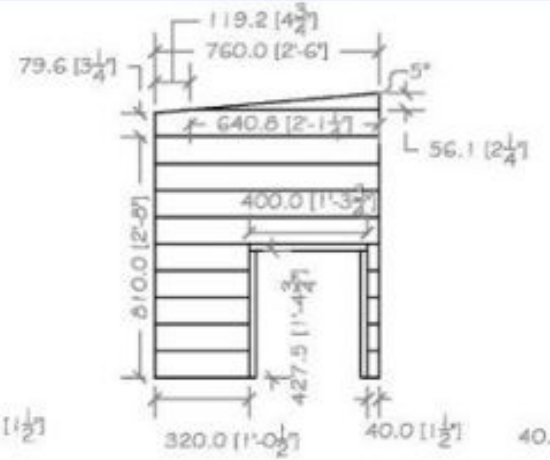
Title: Nest Floor	Drawn: JSG	Approved:	
	Revision: 0	Drawing: 3	
Date: 05-Jan-2009	Scale: Specified		





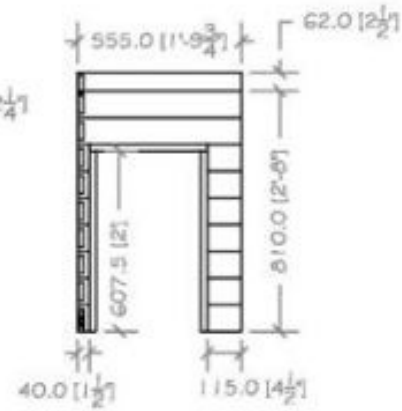
Nest Front Wall

Scale 1:500



Nest Side Wall

Scale 1:500



Nest Back Wall

Scale 1:500

INSTRUCTIONS:

1) Measure and cut pieces for each wall. Be sure to label the pieces carefully to prevent mixing them up.
2)Starting with the front wall, attach a small angle bracket using #20-#30x15mm torque screws to each piece connecting to the front post.
3) Starting at the nest floor, stack the wall pieces on top of one another seven (7) rows high, connecting each row to the corner post.
4) Once all rows are stacked, use a door frame piece and align the rows by drilling through the door moulding using a #20-#30x40mm torque screw. Make sure to align and flush the pieces before each subsequent row.
5) Once all pieces are attached to the door moulding, screw a small angle bracket at the ℄ of the wall to the wall and the floor. Make sure wall is flush with exterior of nest floor.
6) Attach opposing pieces directly to exterior of vertical support using #20-#30x30-40mm torque screws. Make sure pieces are flush with exterior corner of vertical support.g
7) Attach other door moulding in same manner as above. Make sure to align each piece before attaching. Drill through moulding before attaching to prevent cracking moulding.
8) Attach wall piece to nest floor using a small angle bracket. Make sure to check alignment and flush with exterior.
9) Measure and cut top moulding piece. Attach to side moulding pieces by drilling through corner of moulding to prevent cracking.
10) Attach longer wall pieces in same manner as horizontal slats. Connect to corner posts using small angle brackets and attach directly to vertical supports using #20-#30x30mm torque screws.
11) Repeat steps 1-10 for opposing wall.
12) For slide wall, attach pieces either by angle bracket or screw directly through exterior using #20-#30x90-100mm torque screws. Make sure to check flush and alignment on every piece.
13) Follow previous steps for slide door.
14) Make sure top wall pieces do not interfere with top angle.

Notes:

1) These drawings are intended as a construction guide.
2)Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.
3) Always measure dimensions carefully and label each piece individually.
4) Number of pieces are marked below each detail.

Material List

Description	Dimensions mm	Dimensions inch/ft	Quantity
Wall Pieces(TOTAL)	25x90x2400	1x4x10'	5
Door Moulding	25x25x2400	1x1x2'	2

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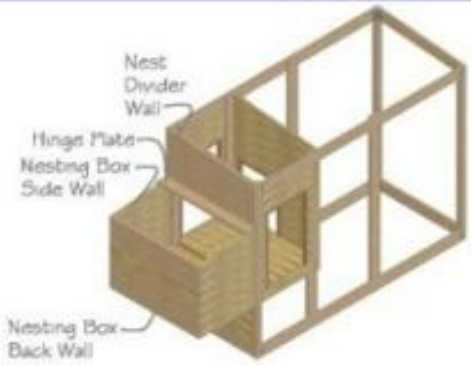
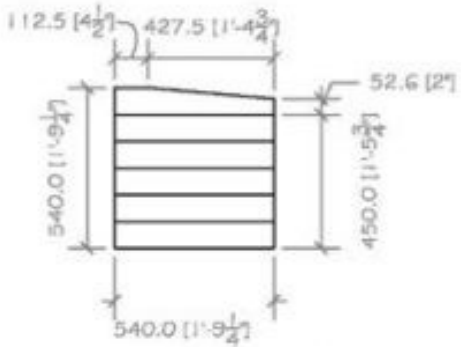
Phone: 406-626-4522

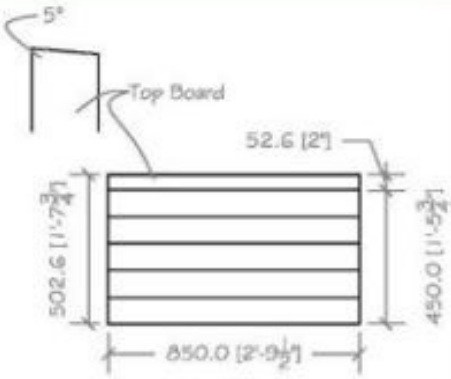
Title: Construction Detail	Drawn: JSG	Approved:	
	Revision: 0	Drawing: 4	
Date: 16-Jan-2009	Scale: Specified		





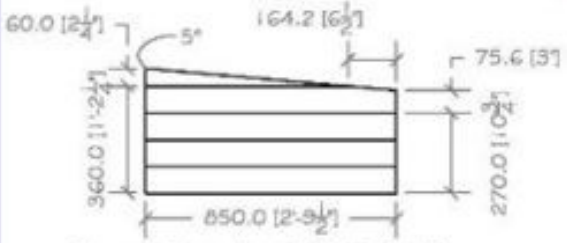
Nesting Box Side Wall (x2)

Scale 1:500



Nesting Box Back Wall (x1)

Scale 1:500



Nest Divider Wall (x1)

Scale 1:500

Notes:
1) These drawings are intended as a construction guide.
2)Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.
3) Always measure dimensions carefully and label each piece individually.
4) Number of pieces are marked below each detail.

INSTRUCTIONS:
1) Measure, lay out and cut boards for nesting box side walls.
2) Use brackets and screws to attach walls to nesting box floor and corner posts. Make sure to check for flush and alignment to exterior edge of nesting box floor and corner post.
3) Measure and cut boards for nesting box back wall. Remember to rip top board of nesting box back wall at 5° so top board aligns with slope of nesting box side boards.
4) Screw ends of back wall directly into ends of side walls.
5) Measure and cut boards for divider wall. Screw divider wall boards directly to corner posts. Make sure top board aligns with top slope of coop as to prevent interference with the roof.
6) Measure and cut hinge plate and screw directly to nesting box side walls. Make sure to flush tight against divider wall.

Material List

Description	Dimensions (mm / English)		Quantity
Nesting box wall (TOTAL)	25x90x1200	2x4x10'	10

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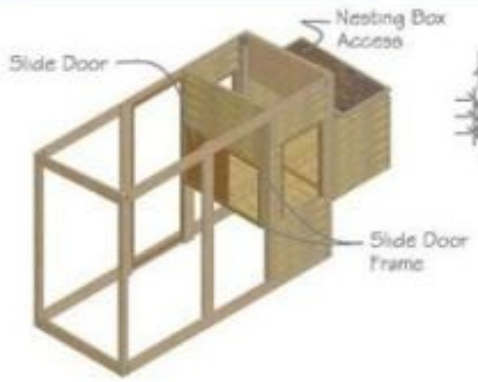
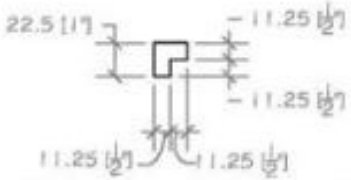
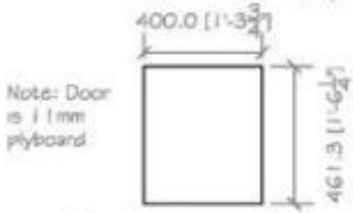
Title: Nesting Box	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	5
Date: 16-Jan-2009	Scale: Specified		





Slide Door Frame(x2)

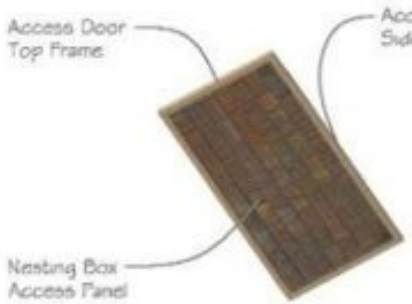
Scale 1:100



Slide Door (x1)

Scale 1:500

INSTRUCTIONS:
1) Measure lumber long enough to include both door frame pieces and width of saw blade (at minimum).
2)Router slide door frame piece to depth specified. Use a guard to prevent gouging.
3) Measure and cut door frame pieces.
4) Attach bottom door frame. Be sure to check flush and level. Presink drill holes to prevent cracking bottom door frame.
5) Measure and cut door from 11mm plyboard sheet.
6) Attach door handle by builder.
7) Use door as a guide for placement of top door frame. Mark placement of top frame and attach. Presink drill holes to prevent door frame from cracking
8) Make sure door does not bind along track



Nesting Box Access (x1)

Scale 1:100

INSTRUCTIONS:
1) Measure and cut pieces for nesting box access door.
2) Measure and cut 11mm plyboard sheet to interior dimensions.
3) Construct frame by attaching pieces as diagrammed. Use #20x40mm torque head screws. Be sure all edges are flush and pieces are square.
4) Lay frame on flat, clean surface and place plyboard sheet inside. Tap sheet into place if necessary and attach through outside of frame with #20x40mm torque screws. Be sure to screw straight and level to prevent breaking surface of plyboard.

Notes:
1) These drawings are intended as a construction guide.
2)Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.
3) Always measure dimensions carefully and label each piece individually.
4) Number of pieces are marked below each detail.

Material List

Description	Dimensions mm	Dimensions imperial	Quantity
Sliding Door Frame	23x23x800	1x1x4'	2
Sliding Door	400x600x11	2x2x2'	1
Access Door Side Frame	23x23x800	1x1x4'	2
Access Door Top Frame	23x23x600	1x1x2'	2
Nesting Box Access Panel	600x800x11	2x4x2'	1

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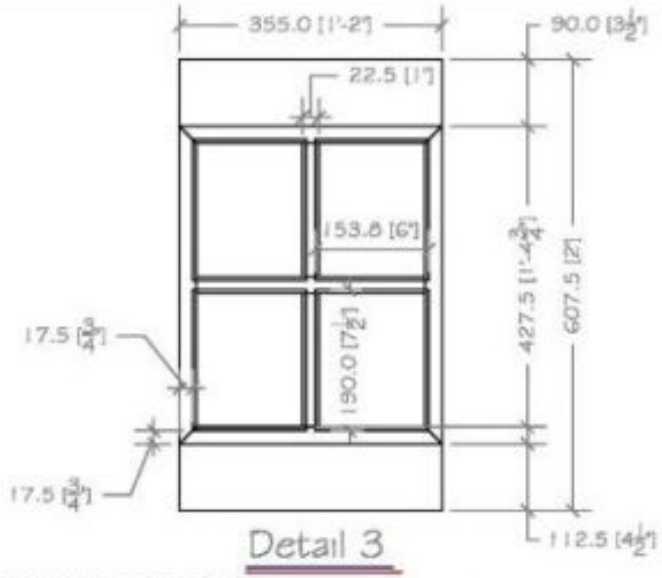
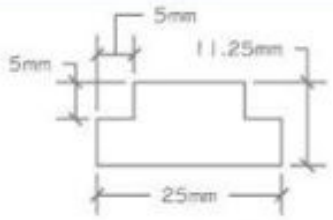
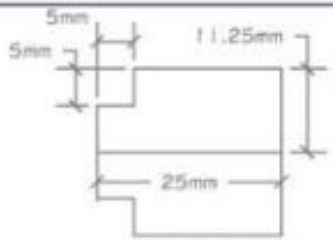
Title: Nesting Box Access Panel	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	6
Date: 05-Jan-2009	Scale: Specified		



Detail 3



Detail 2
Scale NTS



Detail 1
Scale NTS

NOTE These coop wall doors require a high degree of competency to construct. If desired a piece of plyboard may be substituted as a good replacement. These doors are for the convenience of the user to look through and are for aesthetic purposes and not necessary in the overall construction.
We recommend the use of either 10mm clear acrylic or clear fiberglass for the windows.
We do NOT recommend using glass in the construction of these doors.

INSTRUCTIONS:
1) Clamp 25x25x1200mm frame board to a solid surface.
2) Use a guide to router a 5x5x5mm seat for the window plates along entire length of board.
3) Flip board over and reclamp to working surface.
4) Using a guide, router opposing side of board 5x5x5mm so both sides are a mirror of the other (see detail 1).
5) Layout ℄ along entire length of frame board and CAREFULLY rip board along entire length to make 2 mirror pieces. USE A TABLE SAW or RIP SAW if available.
6) Cut 2 pieces each for top, bottom and sides of window frame square to measurements (see detail 3). BE SURE TO LABEL EACH PIECE TO AVOID CONFUSION!
7) Lay out each window piece with respect to location and angle required. Starting with the top piece, CAREFULLY angle cut frame pieces at 45°. Make sure routered edges are flush and form a seat for window panes.
8) When all pieces are cut and seats align, glue edge of each piece and assemble into a square. Clamp and let sit until dry. Once dry, screw edges together using #20x30mm torque screws. Make sure edges are flush with each other and assembly is square!
9) For center muntins, clamp remaining L-shaped pieces to stable work surface with the routered edge on the inside bottom. Router opposite side of frame board to form a "T" with 5x5x5mm seats on both sides. (see detail 2)
10) Layout ℄ of both top and side of frame. Measure and cut middle cross piece and align ℄ of piece and and sides. Make sure seat is flush with both sides.
11) Glue and clamp sides together and let dry. Attach with screws.
12) Measure and cut divider muntins and align ℄ of muntins with ℄ of both top and bottom frame pieces.
13) Glue and clamp top and bottom and intersecting middle. Make sure plate seat remains flush and aligns all around the frame! Once dry, attach with screws from exterior edge of top and bottom plates.
14) Construct 2nd half of frame same as above.
15) Measure and cut 4 window panes and make sure they sit in the seat.
16) Place second half of frame on top and make sure frames fit together and panes fit between.
17) Glue and clamp frame halves and window panes together.
18) Glue top and bottom of frame to 25x90mm cut to width of door frame. Clamp and let dry.
19) Attach hinges (by builder) to top and bottom 25x90mm
20) Repeat steps 1-19 for second door frame.

Notes:
1) These drawings are intended as a construction guide.
2)Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.
3) Always measure dimensions carefully and label each piece individually.
4) Number of pieces are marked below each detail.

Material List

Description	Dimensions mm	Dimensions inch/inch	Quantity
Window Frame	25x25x2400	1x1x12'	2
Window Pane	190x154x10	6"x7 9/16"	8

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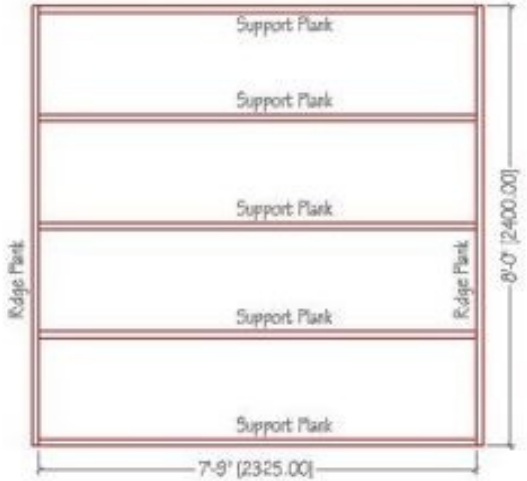
Title: Coop Wal Doors	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	7
Date: 16-Jan-2009	Scale: Specified		

Link to Download **chicken coop Shed**

1) To begin, cut the five (5) base support planks and the two (2) ridge planks as dimensioned below. Remember, these should be treated or sealed to prevent water damage!.

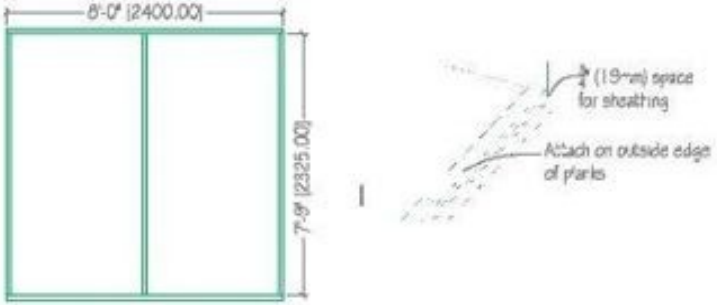
2) Layout ridge planks and support planks as diagrammed below on a smooth, level surface. Attach with three (3) - #20 #30x1½" (40-50mm) star (torque) head screws each.



3) Attach two (2) 4x8½" (. 200x2400x19mm) plywood sheets across the top of the base. Make sure to square up the ends and make sure sides are flush. The sheets should sit square and flush without any cutting necessary. You should now have a platform to start building the walls as diagrammed below.

4) Start on the side walls and cutting out (6) planks 7'-9" (2325) and 4 planks at 8'-0" (2400). These will be the planks you need to use on the side walls of the coop (see diagram below).

5) Attach side walls to the base with #30x1½" star head screws or nail gun. Measure and run a line at ¾" (19mm) to allow for wall sheathing! Be sure to attach along the EXTERIOR edge and follow the side planks or else you will attach only to the sheathing and that is not a strong hold!



6) Repeat step 5 for opposite side. Remember to layout the space for sheathing and attach along the outside edge of the planks so they attach to planks beneath!

7) Use some scrap wood to brace the side walls. **Once the rear wall is complete, you will take the braces off, so only back them out.**

8) At this point the structure should look something like the diagram below.

3Dimensional concepts
15726 N. Park Dr.
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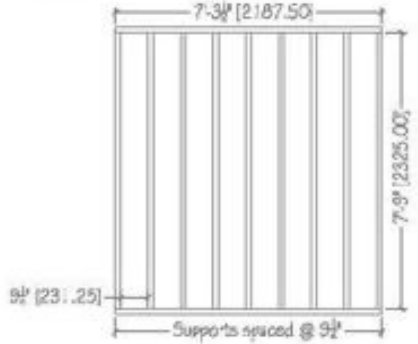
Title: Base & Side Walls	Drawn: JSG	Approved:
	Revision: 0	Drawing: 1
Date: 11-June-2009	Scale: Specified	

9) Now it is time to begin the rear wall of the coop. The rear wall will also contain the nesting boxes. Since poultry sizes vary and are incomprehensible, this example uses a general size of 12" (300mm) high for all nesting boxes. **Actual box sizes may change depending upon builder circumstances!**

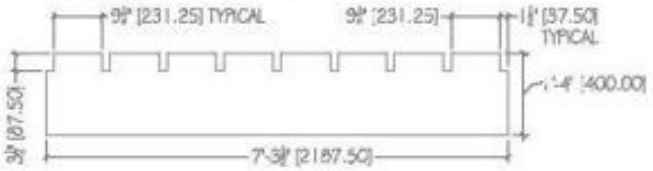
10) Start by cutting the base and roof planks as dimensioned below. **Always measure to double check widths!** If following these instructions carefully, the base board will just barely fit between the base boards of the side walls.

11) Measure and cut your supports. In this guide the supports are placed at 9¼" (231.25mm) O.C. (on center). These will support the nesting boxes and supply framework to attach to. **IT IS THE RESPONSIBILITY OF THE BUILDER TO VERIFY FOWL SIZES AND PLACE SUPPORTS ACCORDINGLY!**



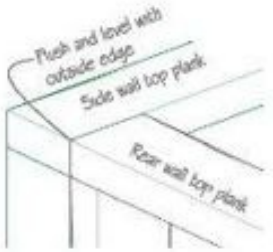
12) Now, use a table saw or circular saw to cut a 4x8 ¾" sheet of plywood in half length-wise and then to the exterior dimensions below. Copy for desired number of nesting boxes. REMEMBER, you will need one (1) extra sheet as a cap to the nesting boxes. The sheets should fit just inside the base planks of the side walls.

13) Layout and cut the slots using a jigsaw. Make sure to drill a pilot hole so you don't break the blade of the jigsaw at the corners! Put aside for now.



14) OK, now it is time to stand the rear wall up and attach it to the side walls using #8x1½" (40-50mm) star head screws. Make absolutely sure the side walls are square vertically and the rear wall is flush with the OUTSIDE edges of the side walls!

15) The structure should look something like the diagram below.



16) Cut a plank to the width diagrammed below. This will be the base support and hold the weight of the nesting boxes. Again, it should fit just between the side walls. Anchor about 2' (600mm) up the rear wall supports. The actual height will vary depending on the comfort of the builder. BE SURE TO USE A LEVEL OR THE NESTING BOXES WILL BE SKEWED!

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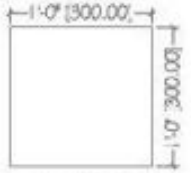
Title: Rear Wall Detail	Drawn: JSG	Approved:
	Revision: 0	Drawing: 2
Date: 11-June-2009	Scale: Specified	

17) Now, we are going to begin the nesting boxes. You should already have the bases cut from previously. Now you need to cut some divider sheets to separate the boxes. How many will depend upon the builder and how many and how high the nesting boxes will go. In this example, you will need to cut at least 27 dividers as diagrammed below. Again, the size and space may vary depending on builder requirements.

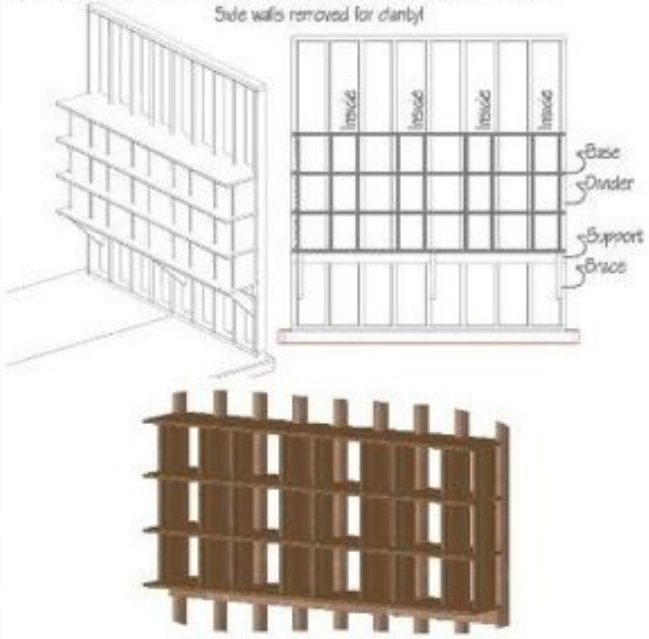


18) Once you have all of the dividers cut, we can begin assembling the nesting boxes. Place one of the base sheets on the support that you attached to the rear wall (see diagram). **TIP* Use simple angle braces to keep the nesting boxes level.**

19) Alternate placing dividers between the wall supports as shown in the diagram below. Attach the dividers to the supports with screws or nail gun.

20) Stack remaining dividers and bases as desired. (More than shown will require more materials).

We recommend alternating dividers between the supports to save time and material. If you wish, for a more professional look, attach one (1) divider to each side of the supports, but you must take into consideration additional material and less space per fowl.



21) Now attach a 1x2 (19x25mm) slat along the front of each row of nesting boxes. These can be purchased or the builder can rip a 2x4 (45x90mm) lengthwise. These will hold bedding for the chickens (or applicable fowl) in the nesting boxes (see diagram).

22) At this point, the nesting boxes are finished, three of four walls are up and the base is enclosed. The structure should look something like this:

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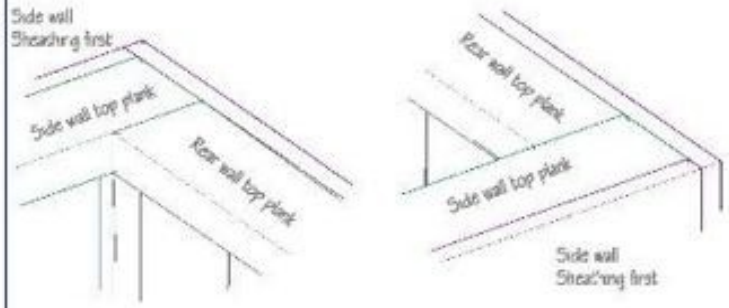
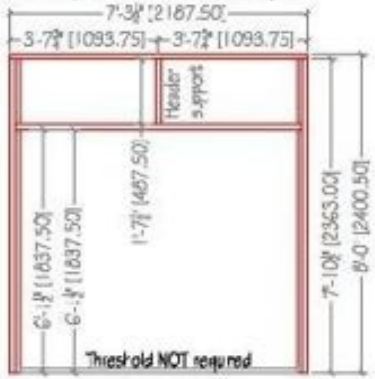
Title: Nesting Boxes	Drawn: JSG	Approved:
	Revision: 0	Drawing: 3
Date: 11-June-2009	Scale: Specified	

17) Before you start with the doors, you need to give the structure some rigidity. Now would be the time to add exterior sheathing (plywood sheets) to the outside of the structure. REMEMBER to level the walls vertically and square the ends of the plywood sheets with the framing. There should be no need to cut any plywood if you follow the diagram below.
18) Set the side wall sheathing first since they do not require the added thickness of the plywood to square. Follow up with the rear wall sheathing and square with the outer edges.

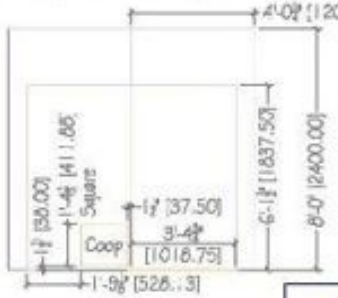


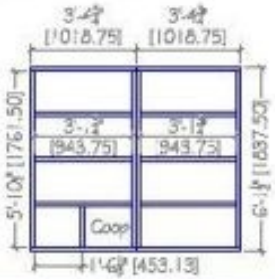
19) The structure should now be strong and rigid. In the next steps we are going to guide you through construction of the doors. **But first, the doors are really dependent on what the builder prefers. These instructions are meant as a guide only, feel free to tweak them as necessary to your personal requirements.**
20) Having personally helped build (and clean) previous coops, I would recommend a double hinge door so both sides open. **We will NOT be using a threshold in this example, the base should lift the coop off the ground as high as to keep most dirt and other inconveniences out of the coop.** If you desire a threshold, simply add a bottom plate to the plans. The double hinge design will allow the user of the coop to clean straight out of the coop while avoiding any unnecessary corners.
21) OK, On with the construction. Measure and cut the planks for the door frame as detailed below. Be sure you include the header as it will support the weight of the doors! **NOTE: If a threshold is desired, be sure to adjust measurements accordingly!**



22) Take the completed frame and attach to the side walls with screws or nail gun. Make sure frame is flush with outside edges and that frame is square. If the frame is not square, you will need to use shims. **Failure to square here will cause the doors to fail to open or close!**

23) Use a table saw to cut two (2) sheets of plywood as detailed below. KEEP BOTH SIDES! The outside edges will be the sheathing around the door frame and the interior can be used as a guide to the door construction! **NOTE - A table saw is recommended for a very straight cut. If skills with a circular saw are adequate, a circular saw may be used, but ALWAYS measure and layout the cuts in pencil. It is VERY important to get the straightest cut possible!**
24) Measure and cut the door framing as detailed in bottom right. Use the plywood sheathing as a guide around the perimeter. You do **NOT** want your door frame bigger than the sheathing! There is only the width of the saw blade on all sides for play, so cut accurately! **Remember to keep the access panel you cut out of one side for later!**





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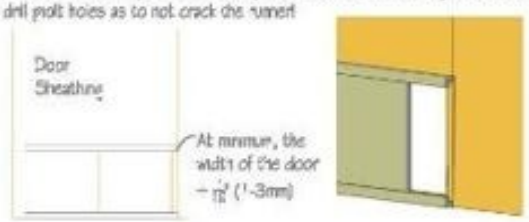
Title: Door Details	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	4
Date: 11-June-2009	Scale: Specified		

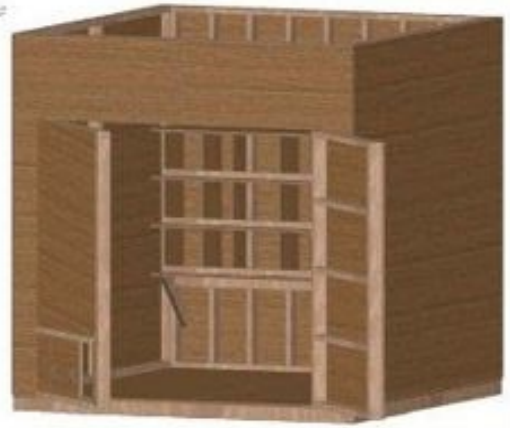
25) Attach the sheathing to the door frames with screws or a nail gun.
26) With assistance, place one door in the open door way and use just one or two shims to lift it off of the base sheathing so it will swing freely later.
27) Before attaching hinges, make sure the door is level vertically. Use assistance and shims to support the weight of the door and get it as centered in the frame (vertically) as possible.
28) Attach at least three (3) hinges to the outside edge of the door so the door will swing outward towards the builder.
29) CAREFULLY align the hinges on the exterior wall and attach with screws. Make sure the door runs level vertically and that it does NOT pass the center of the doorway. Check to make sure the door swings freely.
30) With assistance, place opposing door in the doorway and check to make sure there is enough room. You may have to adjust the second door slightly to get it to fit if measurements and cuts were not taken carefully.
31) Once the second door fits freely, repeat steps 26-29 for opposing door. Check to make sure BOTH doors swing freely on their hinges and open entirely.
32) Up to this point, the structure should look like the diagram below.

33) For the coop access, first use a table saw to rip a 4' (1200mm) - 2x4 (25x90) in half lengthwise. These will form the panel runners.
34) Use a router or a table saw to gouge at least $\frac{3}{4}$" (19mm) out of each of the 4' (1200mm) pieces of timber as shown below.

35) Attach one of the runners (groove up and in) to the very bottom of the door. The lip of the groove should be flush with the bottom of the access hole. Remember to drill a pilot hole so you don't break the runner and level the runner horizontally!
36) **Remember that piece you cut out of the sheathing for the door?** This would be a great place to use it. Slide the panel into the groove in the bottom runner and mark the top edge of the panel on the door.
37) Align the groove of the top runner just above (+$\frac{1}{16}$", +1-2mm) the mark for the access panel. This will ensure that the panel will slide freely. Use a level and tack both ends with a screw. Make sure the panel slides easily and anchor the runner fully to the door. Remember to drill pilot holes as to not crack the runner!



38) Attach handles to the panel and the doors for ease of opening. We recommend a hook-and eye-pin across the two doors to keep them shut. **TIP! The builder may want to install a slide bolt in the top and bottom off the solid door to keep it shut until needed (not required).**
39) The assembly should look something like this:



3Dimensional concepts
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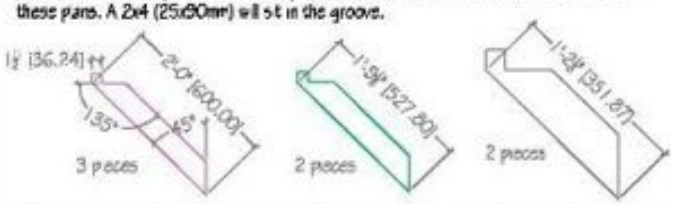
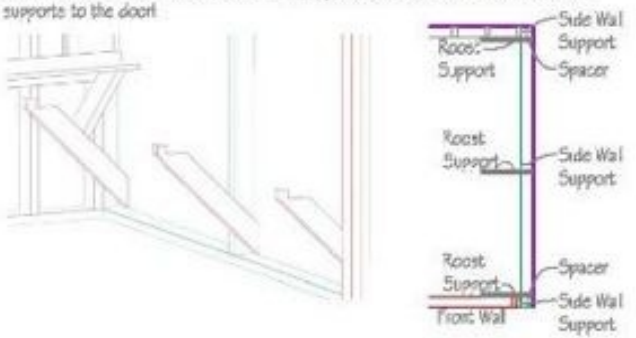
Title: Doors Cont.	Drawn: JSG	Approved:
	Revision: 0	Drawing: 5
Date: 11-June-2009	Scale: Specified	

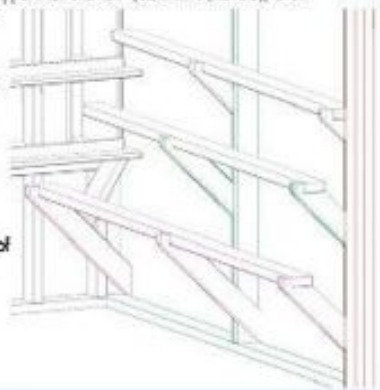
39) Before we get to the roof, let's take a quick look at assembly of the roost. To start, open the solid door and cut the pieces of timber as shown below. **Tip" Notice the notch in the end? It is not required, but for the purposes of a professional finish, we threw it into these plans. A 2x4 (25x90mm) will sit in the groove.**



40) Once the pieces are cut, use the three longest pieces and attach them to the inside of the side wall supports as shown. **TIP" Use a scrap piece as a spacer in the front and back corners.** Attach the spacer(s) first and attach the roost support to that AND the first and second rear wall supports. **DO NOT** attach the front roost supports to the door!

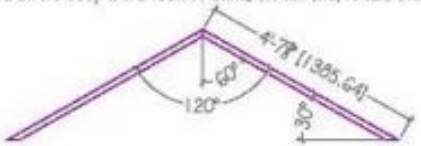


41) Use the two (2) middle length supports and attach in the same manner to the front and middle side wall supports. Locate these so the roost will sit roughly in between the first and second nesting box bases. There will be NO support for the rear (it's a 2x4 (25x90)) it will hold the weight with only 2 supports just fine.
42) Repeat for the third (smallest) roost supports. Locate these so the roost will be located roughly between the second and third nesting box bases (see diagram)
43) Measure and cut 2x4 (25x90mm) planks to fit.
44) Set the roost in the seats (if cut) and attach with screws (see diagram).



NOTE" IF there are more than three (3) rows of nesting boxes. Repeat the pattern of roosts as required (largest, middle, shortest).

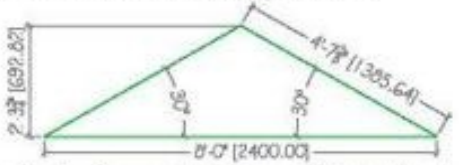
45) The only remaining structure on the coop is the roof. To start, cut ten (10) rafters and assemble as diagrammed.



45) Measure and cut five (5) each of the middle and horizontal supports as shown and attach. Slide the middle support up until it is snug and attach to roof rafters.

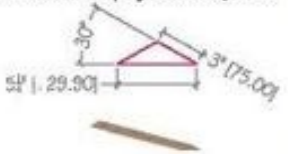
46) Cut two (2) rafters as drawn below. These will provide a nailing surface should the builder want to sheath the interior ceiling.

47) Use a sheet of plywood and cut two (2) end sheets as diagrammed below.



48) Attach the sheathing to 2 of the rafter assemblies (1 sheet each). You should have three (3) rafter assemblies and two (2) exterior rafter assemblies.

49) Rip a 8'-0" 2x6 (150x2400mm) plank as shown below. This will be a girder to stabilize the roof rafters. **In areas of low snow loads, this step is not required. The girder will keep the rafters from warping under heavy loads.**



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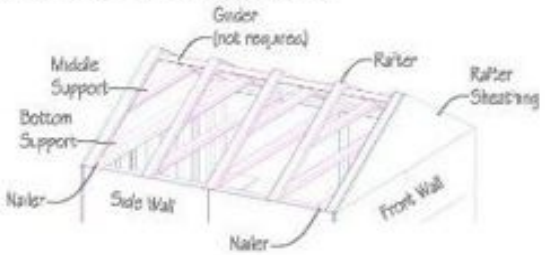
Title: Roof Details	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	6
Date: 11-June-2009	Scale: Specified		

49) The rafters are now ready to go up onto the roof. Start at one side and align the end rafter flush with the exterior sheathing of the wall below it as shown. Place the rafters as shown.

50) **IF REQUIRED**, before you place the second exterior rafter assembly, slide the girder up and rest it on top of the middle rafter supports. Have an assistant hold one end and attach the length of the coop at each rafter. **Be sure to butt the end against the rafter sheathing!**

51) Put the second rafter up to enclose the assembly and attach to the walls and, if required, the girder.

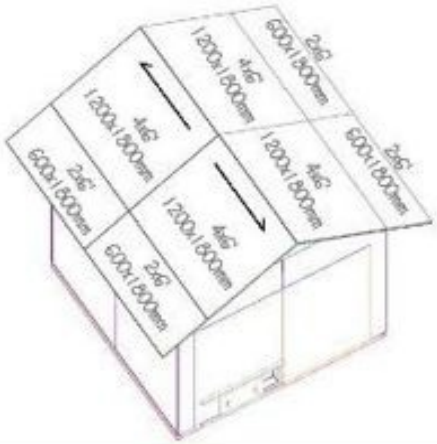
52) Place the nailers snug against the end rafter planks on the interior side. These will be a surface to nail sheathing to from inside (if required).



53) At this point, there is nothing left but the roof sheathing. Start by ripping four (4) - 4x8' (1200x2400mm) plywood sheets to 4x6' (1200x1800mm). **"TIP" Use a table saw or circular saw to rip one (1) edge of each of the four (4) sheets @ 60° so the ends will but together nicely (not required).**

54) Take two (2) of the 4x6' (1200x1800mm) sheets and rip them in half lengthwise to make four (4) 2'x6' (600x1800mm) sheets.

55) Layout the sheets as diagrammed and attach to the rafters. **Make sure to start at the MIDDLE rafter and lay each sheet so you have half of the middle rafter as a nailing surface!**



56) CONGRATULATIONS. For all intensive purposes you are done with the coop!

- *We recommend covering the roof with shingles, tin, asphalt shingles, builder's choice.
- *The wood will last much longer if you apply a coat of sealer: (polyurethane, water seal, etc.) to all exposed surfaces.
- *Apply a veneer to the outside to protect it (shingles will also work well).
- *We recommend enclosing the ceiling to prevent undesirables (wasps, bees, hornets, bats, etc.) from building nests in the rafters. Measure and cut the sheathing as normal and have an assistant hold it up while you attach it to the bottom of the rafters. NOW, that's what those nailers are for!
- *Before enclosing any wall or ceiling, insulation is a great idea!
- *Make it your own!

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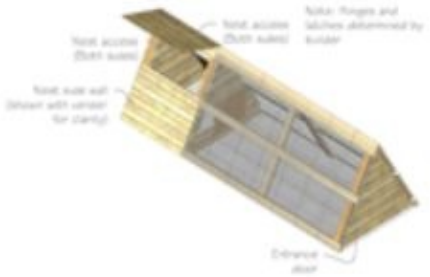
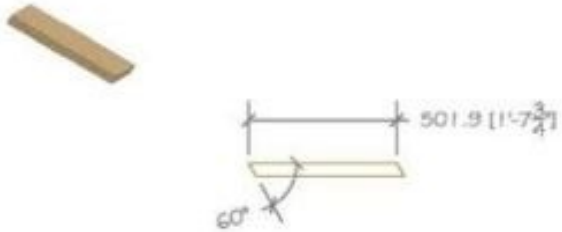
Title: Roofing Cont.	Drawn: JSG	Approved:
	Revision: 0	Drawing: 7
Date: 11-June-2009	Scale: Specified	



Link to Download **chicken coop 4**

1 Base Plate (x4)
Scale 1:500

2 Nest Door Plate (x1)
Scale 1:500



3 Nesting Header (x1)
Scale 1:500

Notes:
1) These drawings are intended as a construction guide.
2)Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.
3) Always measure dimensions carefully and label each piece individually.
4) Number of pieces are marked below each detail.

4 General Header (x4)
Scale 1:500

Material List

Description	Dimensions mm	Dimensions inch	Quantity
Base Plate	45x90x1200	2x4x4'	4
Nesting Door Plate	45x90x600	2x4x2'	1
Nesting Header	45x90x600	2x4x2'	1
General Header	45x90x300	2x4x1'	4

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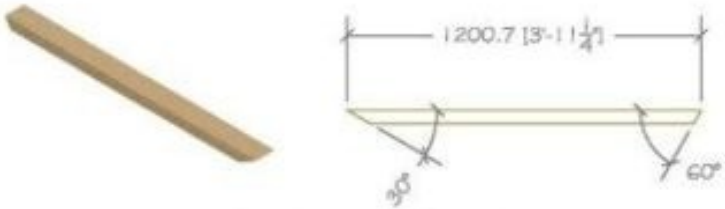
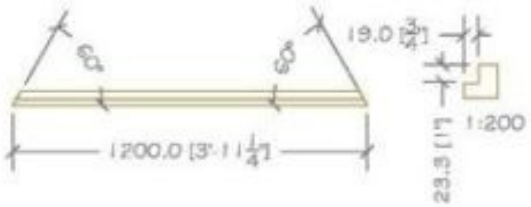
Title: Construction Detail	Drawn: JSG	Approved:	
	Revision: 0	Drawing: 1	
Date: 05-Jan-2009	Scale: Specified		



5 Side Plate (x8)
Scale 1:500

6 Top Spacer (x6)
Scale 1:500



7 Bottom Track (x1)
Scale 1:500

Notes:
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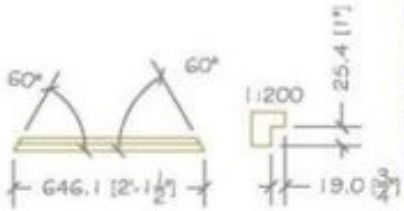
4) Number of pieces are marked below each detail.

Material List			
Description	Dimensions mm	Dimensions english	Quantity
Side Plate	45x90x1500	2x4x4'	8
Bottom Spacer	45x90x600	2x4x2'	6
Top Spacer	45x90x600	2x4x2'	6
Bottom Track	45x90x1200	2x4x4'	1
Top Track	45x90x900	2x4x4'	1

8 Bottom Spacer (x6)
Scale 1:500



2 Top Track (x1)
Scale 1:500

3D dimensional concepts
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Title: Construction Detail	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	2
Date: 05-Jan-2009	Scale: Specified		

INSTRUCTIONS:

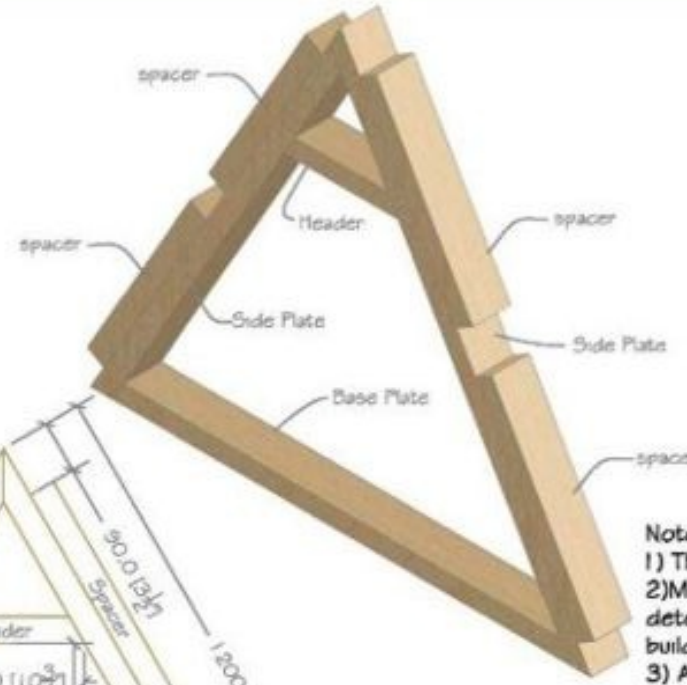
1) Use 1 base plate, 2 side plates, 2 bottom spacers, 2 top spacers and a general header.

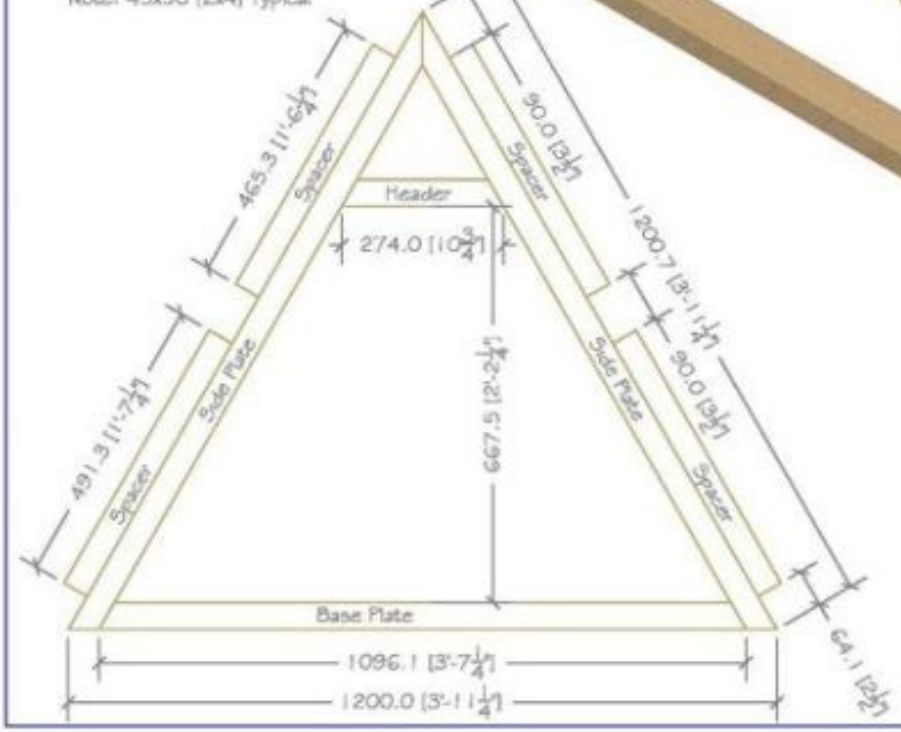
2) Carefully connect plates as shown using #20 to #30 torque head screws 60 mm (or equivalent) straight into the connecting piece.

3) Measure header location as detailed and mark location on side plates. Connect by screwing in straight into the header.

4) Mark spacers to make sure horizontal supports will fit between.

Note: 45x90 [2x4] Typical





Entrance Const. Details

Scale 1:250

Notes:

1) These drawings are intended as a construction guide.
2)Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.
3) Always measure dimensions carefully and label each piece individually.
4) Number of pieces are marked below each detail.

Material List

Description	Dimensions: mm	Dimensions: imperial	Quantity
Top Spacer	45x90x600	2x4x2'	2
Bottom Spacer	45x90x600	2x4x2'	2
Side Plate	45x90x1500	2x4x4'	2
Base Plate	45x90x1200	2x4x4'	1
Header	45x90x300	2x4x1'	1

3D imensional concepts

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Title: Construction Detail	Drawn: JSG	Approved:
	Revision: 0	Drawing: 3
Date: 05-Jan-2009	Scale: Specified	

INSTRUCTIONS:

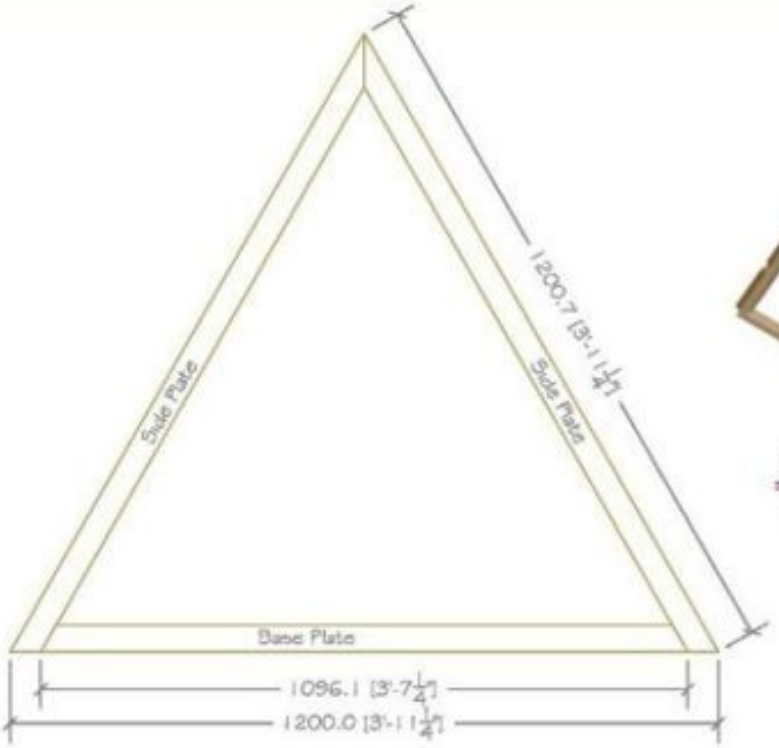
1) Use 1 base plate and 2 side plates.

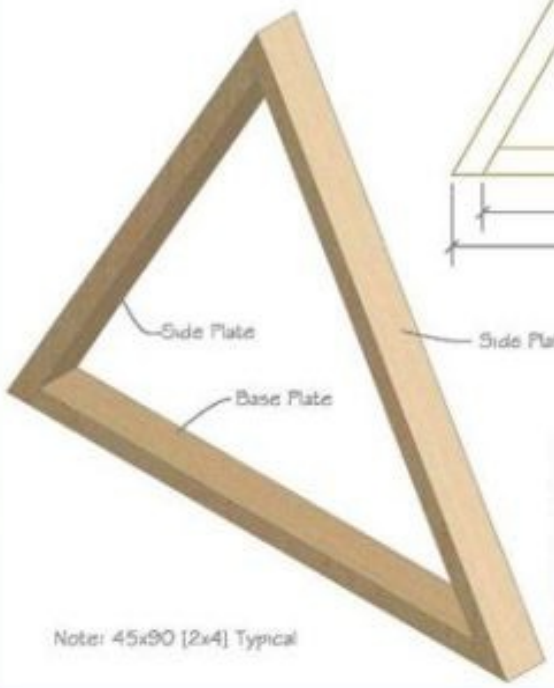
2) Carefully connect plates as shown using #20 to #30 torque head screws 60 mm (or equivalent) straight into the connecting piece.

NOTE: If connecting to a platform, the base plate may be used as a spacer. Tack the baseplate to the sideplates for easy removal and ancor the side plates to the platform.

Support Const. Details

Scale 1:250





Note: 45x90 [2x4] Typical

Notes:
1) These drawings are intended as a construction guide.
2)Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.
3) Always measure dimensions carefully and label each piece individually.
4) Number of pieces are marked below each detail.

Material List

Description	Dimensions mm	Dimensions imperial	Quantity
Side Plate	45x90x1500	2x4x4'	2
Bottom Plate	45x90x1200	2x4x4'	1

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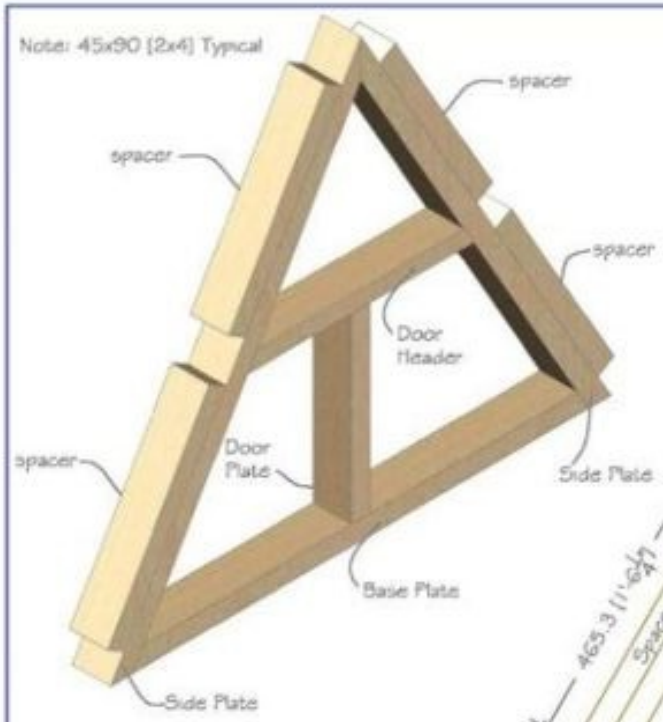
Title: Construction Detail	Drawn: JSG		Approved:
	Revision: 0		Drawing: 4
Date: 05-Jan-2009	Scale: Specified		



INSTRUCTIONS:

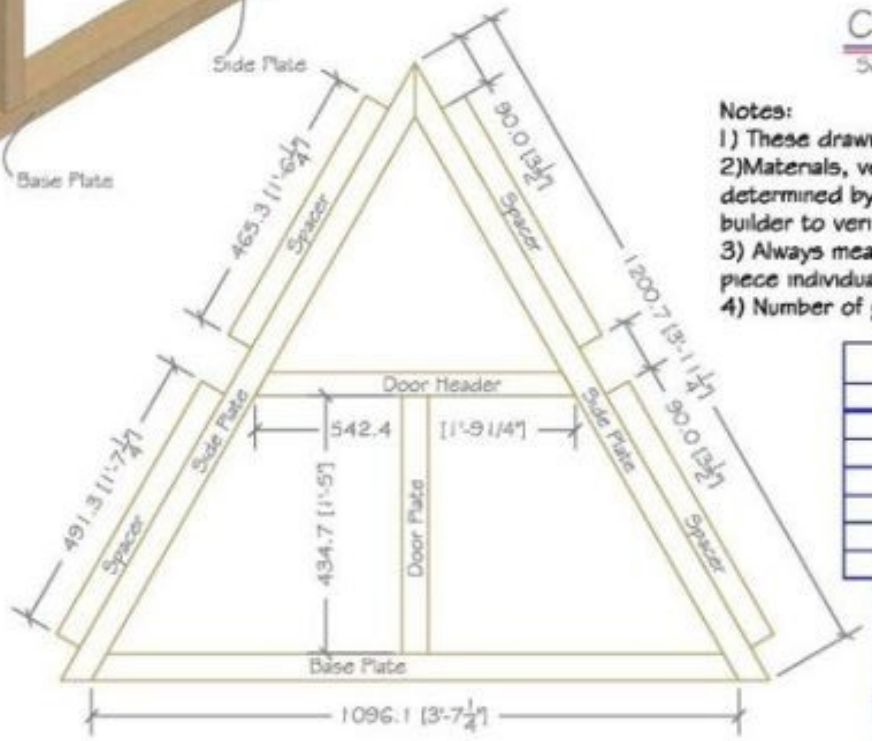
1) Use 1 base plate, 2 side plates, 2 bottom spacers, 2 top spacers and a general header.

2) Carefully connect plates as shown using #20 to #30 torque head screws 60 mm (or equivalent) straight into the connecting piece.

3) Mark the centerline of the baseplate and crew through bottom of baseplate into door plate.

Coop Entrance Details

Scale 1:250



Notes:

1) These drawings are intended as a construction guide.
2)Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.
3) Always measure dimensions carefully and label each piece individually.
4) Number of pieces are marked below each detail.

Material List

Description	Dimensions mm	Dimensions english	Quantity
Top Spacer	45x90x600	2x4x3'	2
Bottom Spacer	45x90x600	2x4x3'	2
Door Jamb	45x90x600	2x4x2'	1
Door Header	45x90x600	2x4x2'	1
Side Plate	45x90x1500	2x4x4'	2
Base Plate	45x90x1200	2x4x4'	1

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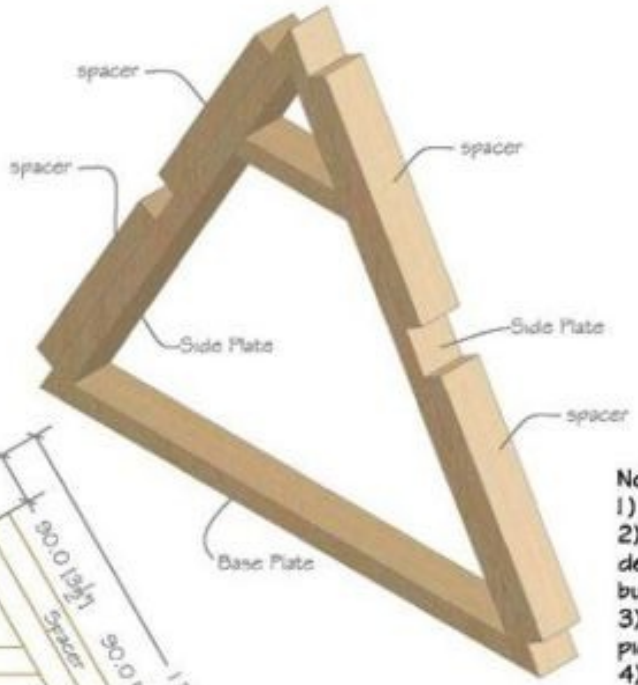
Title: Construction Detail	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	5
Date: 05-Jan-2009	Scale: Specified		

INSTRUCTIONS:
1) Use 1 base plate, 2 side plates, 2 bottom spacers, 2 top spacers and a general header.

2) Carefully connect plates as shown using #20 to #30 torque head screws 60 mm (or equivalent) straight into the connecting piece.

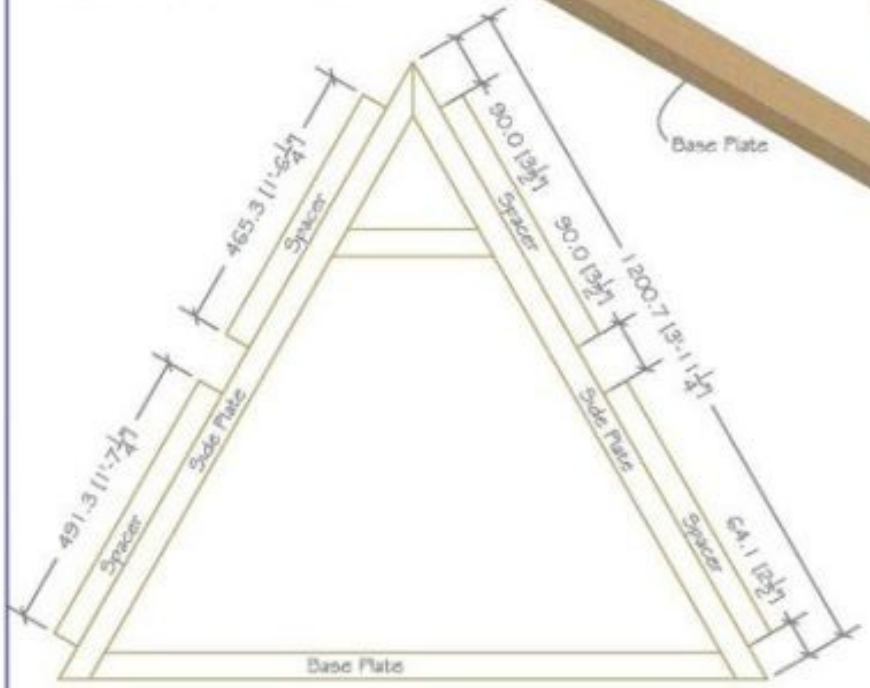
3) Measure header location as detailed and mark location on side plates. Connect by screwing in straight into the header.

4) Mark spacers to make sure horizontal supports will fit between.



Coop Back Wall Details

Scale 1:250



Notes:
1) These drawings are intended as a construction guide.
2)Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.
3) Always measure dimensions carefully and label each piece individually.
4) Number of pieces are marked below each detail.

Material List

Description	Dimensions mm	Dimensions english	Quantity
Top Spacer	45x90x600	2x4x3'	2
Bottom Spacer	45x90x600	2x4x3'	2
Header	45x90x300	2x4x1'	1
Side Plate	45x90x1500	2x4x4'	2
Base Plate	45x90x1200	2x4x4'	1

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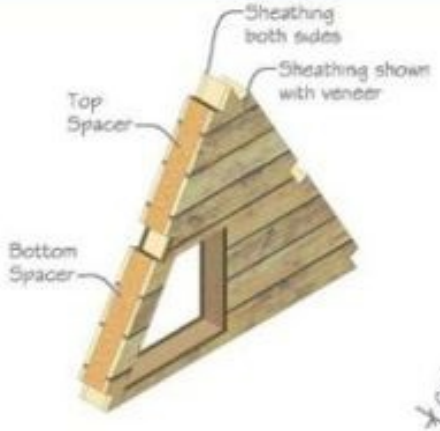
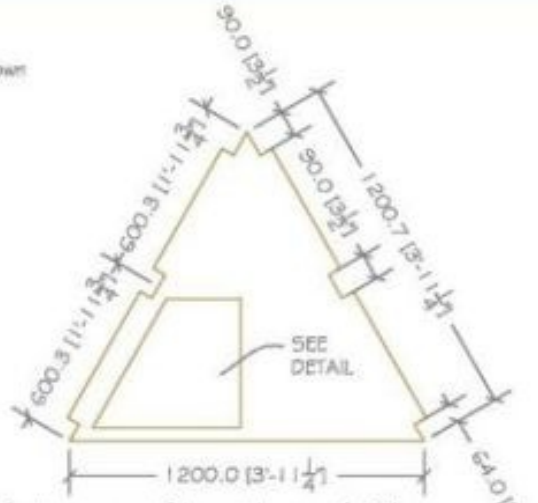
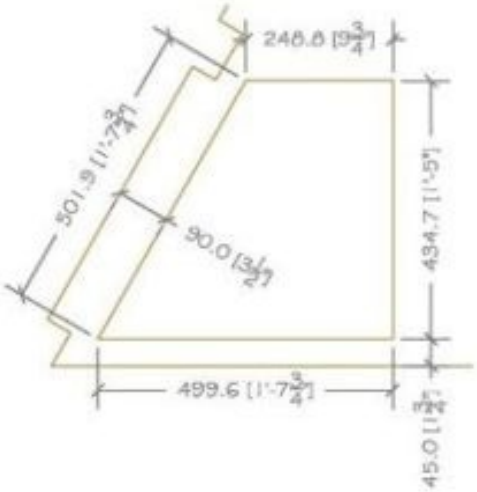
Title: Construction Detail	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	6
Date: 05-Jan-2009	Scale: Specified		

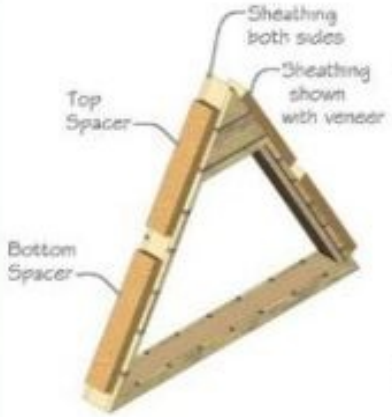


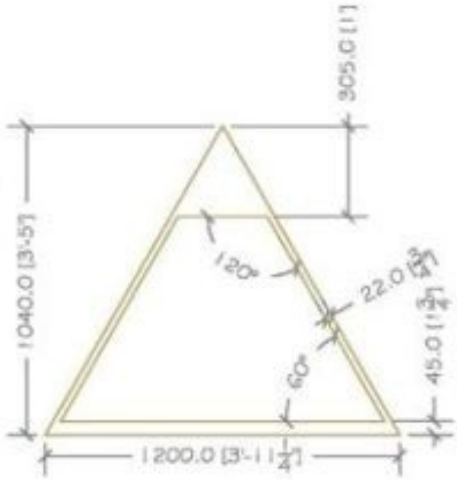




Nest Entrance Sheathing (x2)

Scale 1:500





Coop Entrance (x2)

Scale 1:500

Note:

These drawings are intended as a construction guide. Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.

Notes:

1) Layout cuts and openings on sheets and check for accuracy against dimensions of actual lumber.

2) These drawings assume plywood sheet sizes of 1200x2400x18.5mm [4'x8'x¾]. If using different sheet thickness, adjust measurements accordingly.

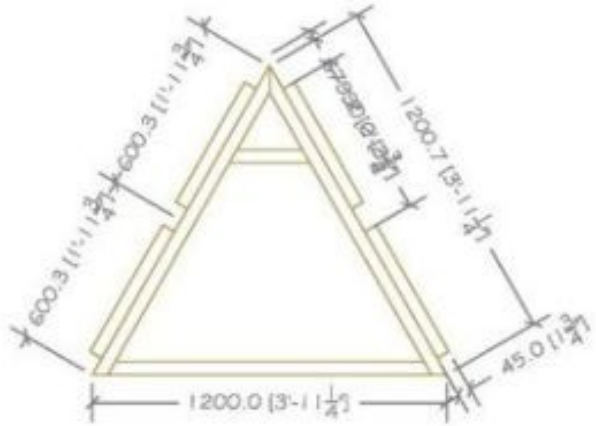
3) All examples show veneer siding (not required).

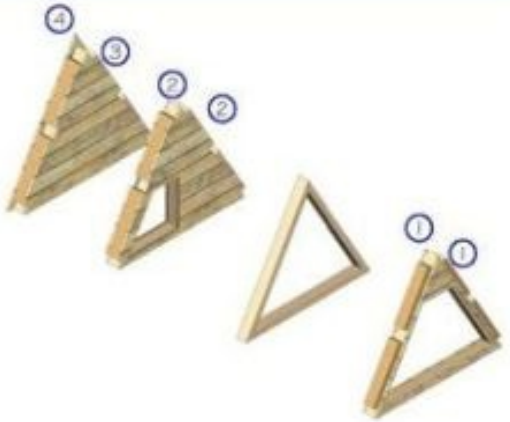
Material List

Description	Dimensions mm	Dimensions imperial	Quantity
Coop Entrance Sheathing	1200x2400x18.5	4'x8'x¾	2
Nest Entrance Sheathing	1200x2400x18.5	4'x8'x¾	2

3D imensional concepts
15726 N. Park Dr.
Frenchtown, MT, USA 59834
Cell: 406-546-6672
Phone: 406-626-4522

Title: Sheating details	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	7
Date: 05-Jan-2009	Scale: Specified		

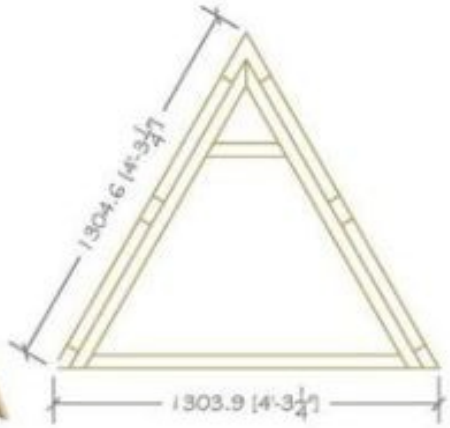




Nest Back Wall (x1)

Scale 1:500

Note:
These drawings are intended as a construction guide. Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.



Coop Back Wall (x1)

Scale 1:500

Notes:
1) Layout cuts and openings on sheets and check for accuracy against dimensions of actual lumber.

2) These drawings assume plywood sheet sizes of 1200x2400x18.5mm [4'x8'x3/4"]. If using different sheet thickness, adjust measurments accordingly.

3) All examples show veneer siding (not required).

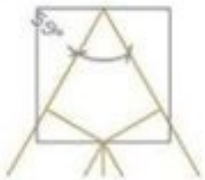
Material List

Description	Dimensions mm	Dimensions imperial	Quantity
Nest back Wall Sheathing	1200x2400x18.5	4'x8'x3/4"	1
Coop Back Wall Sheathing	1200x2400x18.5	4'x8'x3/4"	1

3D imensional concepts
15726 N. Park Dr.
Frenchtown, MT, USA 59834
Cell: 406-546-6672
Phone: 406-626-4522

Title: Sheathing details 2	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	8
Date: 05-Jan-2009	Scale: Specified		

90x90



90x90 Crown Detail (x2)

Scale 1:100

Bottom Supprt Detail (x2)

Scale 1:100

INSTRUCTIONS:

1) Before attaching supports, make sure nest door is installed and slides freely. (See detail on page 10)

2)Level and attach bottom track making sure angles are flush with nest wall sheathing and side plate. Measure and drill pilot holes in both tracks to prevent cracking tracks.

3) Use nest door as a guide to place top track. Make sure nest door slides freely before anchoring top track.

Make sure nest door is in place and working BEFORE attaching side supports or it will be difficult to install afterwards!

3) Cut and rip bottom support as detailed. (If longer or shorter structure is required, adjust dimensions accordingly).

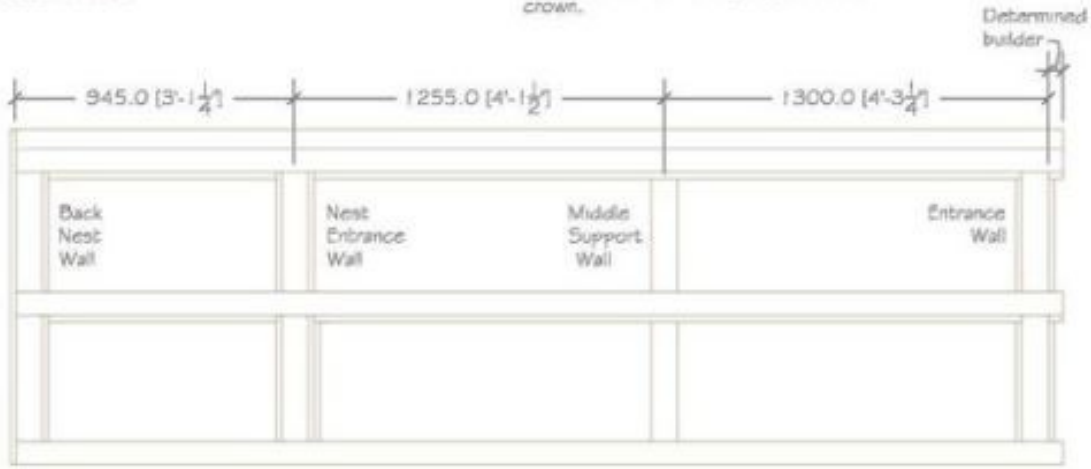
4) Flush back of bottom support with back sheathing. Support should fit in seat, flush with bottom of base plate. Repeat for opposite side.

If needed, remove bottom plate from middle wall before attaching to bottom support to prevent tripping hazard.

5) Measure and layout position of remaining walls. Remember to check for vertical level before attaching to bottom support.

6) Repeat for remaining supports and crown.

Note:
Overall length and wall placements may vary according to builder requirements



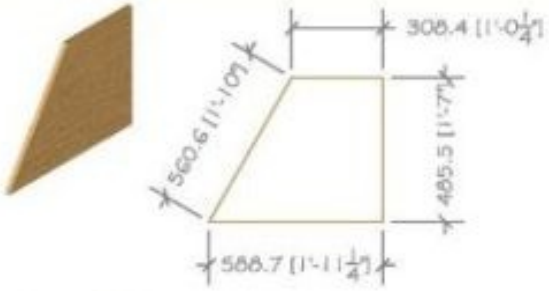
Note:
These drawings are intended as a construction guide. Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.

Material List

Description	Dimensions mm	Dimensions english	Quantity
Bottom Support	45x90x3600	2x4x12'	2
Mid and Top Support	45x90x3600	2x4x12'	4
Crown	90x90x3600	4x4x12'	1

3D imensional concepts
15726 N. Park Dr.
Pinehaven, MT, USA 59834
Cell: 406-546-6672
Phone: 406-676-4522

Title: Supports	Drawn: JSG	Approved:	
	Revision: 0	Drawing: 9	
Date: 05-Jan-2009	Scale: Specified		



Nest Sliding Door

Scale 1:500

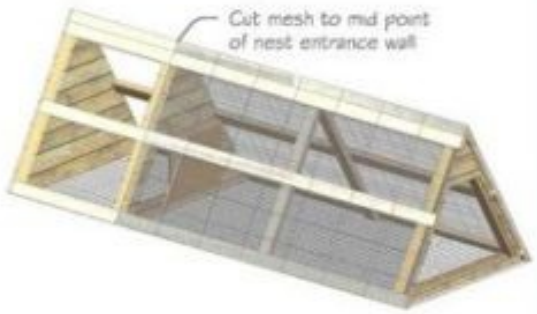
INSTRUCTIONS:

1) Turn entire structure on side so base plates are facing up.
2) Starting at one end, tack floor mesh to the bottom edge of base plates.
3)Repeat for top edge.
6) Repeat for remaining 3 walls
7) Once floor mesh is tacked to all walls and measurments are good, attach floor mesh with 16 gauge 22.5mm staples (or equivalent)
8) Attach to each wall in order, checking tightness per wall before stapling to prevent pockets.

For longer or shorter structures, be sure to adjust measurements accordingly.

INSTRUCTIONS FOR INSTALLING ROOF MESH:

1) Unroll mesh over structure and make sure there is enough mesh to completely cover structure.
2) Pull tight over crown.
3) Attach with 16 gauge 22.5mm staples (or equivalent) ~typ~
4) Working down, pull mesh tight and permanently attach to horizontal supports.
5) Fold edges of mesh over bottom support and pull tight around bottom of structure.
6) Attach and cut away any excess.



Floor Mesh

Scale Not to Scale

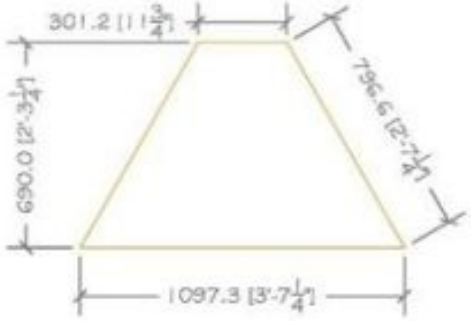
Note:
These drawings are intended as a construction guide. Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.

Material List			
Description	Dimensions cm	Dimensions english	Quantity
Floor Mesh	By builder	By builder	1
Top Track	By builder	By builder	1

3D imensional concepts
15726 N. Park Dr.
Polson, MT, USA 59860
Cell: 406-546-6672
Phone: 406-676-4522

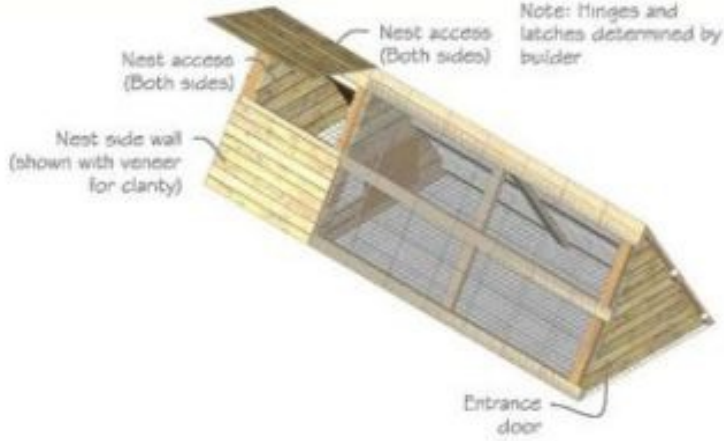
Title: Mesh and footing	Drawn: JSG	Approved:	
	Revision: 0	Drawing: 10	
Date: 05-Jan-2009	Scale: Specified		

Notes:
1)Door shown with veneer. If adding veneer, adjust base measurements accordingly.
2)If door does not swing freely, sand down sides and round off edges.
3)Always take hing type and placement into account when installing door.

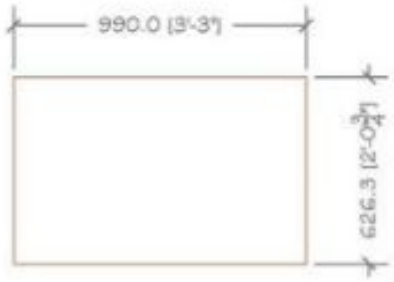


Entrance door (x1)

Scale 1:500

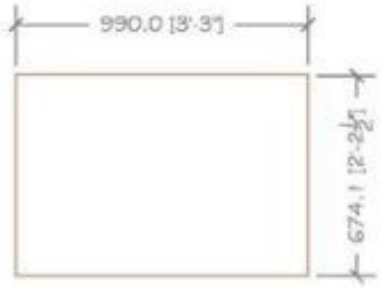


Note:
These drawings are intended as a construction guide. Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.



Nest Side Wall (x2)

Scale 1:500



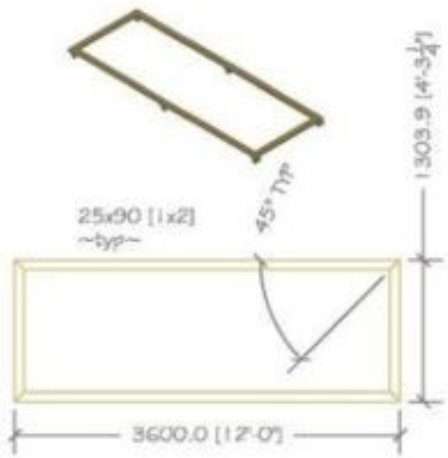
Nest Access Panel (x2)

Scale 1:500

Material List			
Description	Dimensions mm	metric	Quantity
Entrance Door	1200x900x19	4'x4'x3/4"	1
Nest Side Wall	1200x900x19	4'x4'x3/4"	2
Nest Access Panel	1200x900x19	4'x4'x3/4"	2

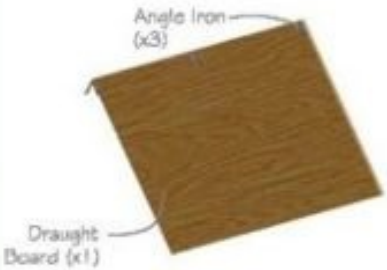
3Dimensional concepts
15726 N. Park Dr.
Frenchtown, MT, USA 59834
Cell: 406-546-6672
Phone: 406-626-4522

Title: Entrance and nest door	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	11
Date: 05-Jan-2009	Scale: Specified		



Caster Support (x1)

Scale 1:500



Draught board (x1)

Scale 1:500

INSTRUCTIONS:

1) Cut caster support timbers as detailed and attach with #20-#30 x 60-70 mm [2½-3"] screws. If structure is longer or shorter, be sure to adjust measurements accordingly.

2) Tip coop structure on side and ensure caster support fits as desired.

3) Layout casters and mark positions of bolt holes. 4 lock casters at each corner and 2 free casters at long support ℄ for middle support.

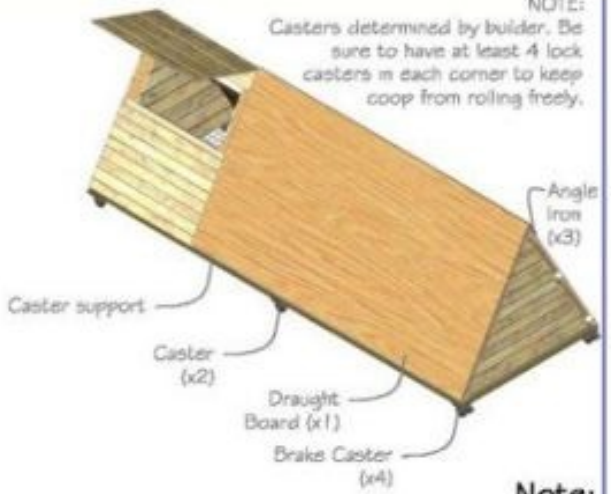
4) Sink nut holes 20mm, or until nuts are, at minimum, flush with top of sink hole and caster bolts do not interfere with caster support.
If casters do not include bolts, compare bolts to those on the caster plate to ensure a correct fit

4) Use 35mm bolts to attach casters to caster support. Leave at least 25 mm of timber to anchor casters to support.

5) Once casters are attached and tightened against caster support and caster support fits as desired, anchor entire caster support using #20-#30x35mm torque head screws roughly every 300mm [1'-0"]

6) A draught board can be constructed with plywood and 3 pieces of 60° angle iron with rounded edges to prevent tearing mesh. (If desired, cut slats into the draught board to allow for air flow) (See detail)

NOTE:
Casters determined by builder. Be sure to have at least 4 lock casters in each corner to keep coop from rolling freely.



Note:
These drawings are intended as a construction guide. Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.

Material List			
Description	Dimensions mm	Dimensions finish	Quantity
Long Caster Support	45x90x3600	2x4x12'	1
Cross caster support	45x90x1500	2x4x6'	2
Caster	By builder	by builder	6
Draught board	1200x2400x25	4'x8'x1"	1
60° angle iron	100x100x12 mm	4x4x⅜ inch	3

3D imensional concepts
15726 N. Park Dr.
Pinckhaven, MT, USA 59834
Cell: 406-546-6672
Phone: 406-676-4522

Caster support and caster	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	12
Date: 05-Jan-2009	Scale: Specified		

Links to Download **Chicken coop 5**

1) Image shown with shingles and/or vendor siding (by builder)
2) These plans are intended as a guide ONLY. Feel free to make changes, adjustments and revisions to suit your requirements.
3) We do not assume to know the size and type of fowl being housed in this coop. Adjustments may be necessary on a project-per-project basis.
4) This coop is large enough for approximately 10-20 chickens. Geese, turkey and other fowl will require revisions.
5) Always use safety equipment and safe construction practices! We will not be held liable for any personal injuries that may occur.

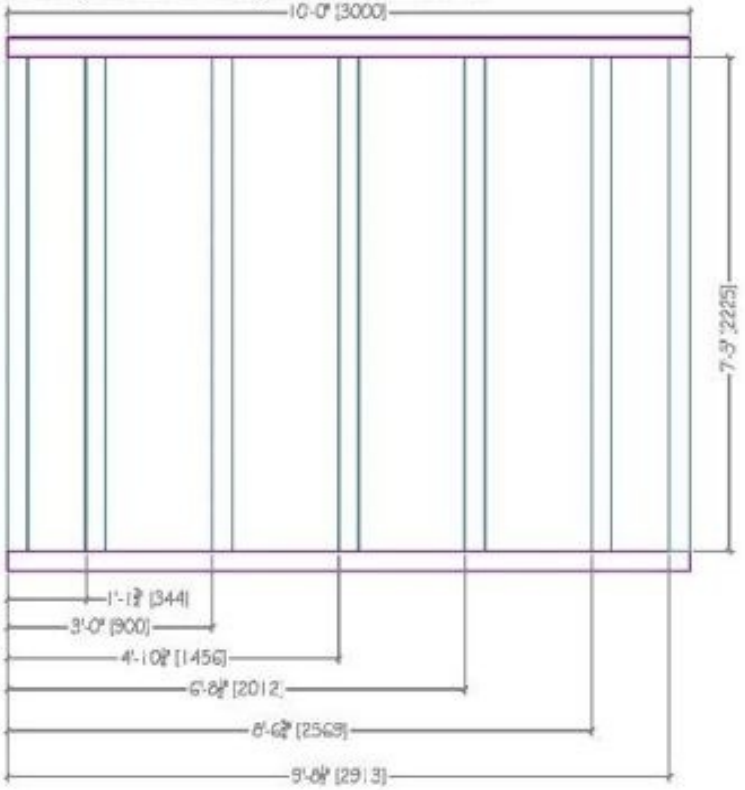
Material List

Description	Dimensions mm	Dimensions English	Quantity
Base			
Skid	90x90x3000	4x4x10'	7
Long Plank	45x90x2400	2x4x10'	2
Short Plank	45x90x2400	2x4x8	7
Plywood Sheet	1200x2400x19	4x8 sq ft	4
Fiberglaze Board	By Builder	By Builder	
Side Walls			
Planks	45x90x2400	2x4x8	24
Plywood Sheathing	1200x2400x19	4x8 sq ft	6
Rear Wall			
Rear Support Plank	45x90x2400	2x4x8	9
Rear Ridge Plank	45x90x3000	2x4x10'	1
Rear Sheathing	1200x2400x19	4x8 sq ft	2
2x6 Rear Sill	45x150x3000	2x6x10'	1
Nesting Boxes			
Nesting Box Support	45x90x3000	2x4x10'	10
Nesting Box Base	1200x2400x19	4x8 sq ft	2
Plywood Sheet	1200x2400x19	4x8 1/2 sq ft	4
Front Wall & Doors			
Door Planks	45x90x2400	2x4x8	6
Front Wall and Door Sheath.	1200x2400x19	4x8 1/2 sq ft	10
Front Wall Support Plank	45x90x3000	2x4x10'	4
Roost			
Roost Supports	45x90x2400	2x4x8	2
Roost Planks	45x90x2400	2x4x8	3
Roof			
Roof Planks	45x90x2400	2x4x8	16
Sheathing	1200x2400x19	4x8 sq ft	6
Roof			
Roof Planks	45x90x2400	2x4x8	16
Sheathing	1200x2400x19	4x8 sq ft	6
Trim			
long 1x4 planks	25x90x3000	1x4x10'	4
short 1x4 planks	25x90x2400	1x4x8'	14
Miscellaneous: To be determined by builder			
Handles	By Builder	By Builder	4
Hinges	By Builder	By Builder	12
Vinyl/Siding	By Builder	By Builder	300 sq. ft.
Wood Sealant	By Builder	By Builder	2 Gallons
Paint	By Builder	By Builder	7 Gallons
Screws	#20-30x60mm	By Builder	300 Min.
Shingles	By Builder	By Builder	1 Box Min.
Latches	By Builder	By Builder	4 Min.

Before we get started, it is important that the builder choose pressure treated lumber for the base of this coop. This coop is going to be designed to be relocated. The sleds on the bottom are to be constructed of pressure treated lumber to prevent water intrusion and rot. If a concrete base is going to be used, pressure treated timber is still recommended but not vital.

1) To begin, start by cutting two (2) 4x4's 10'-0" (90x90x3000mm). You will need to cut a total of ten (10) 4x4 (90x90mm) horizontal supports at 7'-5" (2225mm). This should give you an even 10' (3000mm) length by 8' (2400mm) width base for the coop.

2) At this point, attachments are very important. You MAY choose to use screws or a pneumatic nailer (nail gun). Being this is the base and this coop will be heavy, If you are going to move it, we recommend using at least ⅜"x5" (13x125mm) lag screws to hold the sled components together. You will want to countersink the heads so they are not in the way of the final trim later on.



3-Dimensional Concepts

15725 S. York Dr.
Frenchtown, MT, USA 59834
Cell: 406-3[illegible]5-6672

Title: Base	Drawn: JSG	Approved:
	Revision: 0	Drawing: 1
Date: 01-Mar-2010	Scale: Varies	

1) IF this coop will not be moved, we recommend setting it on a concrete base to prevent water intrusion. Begin by laying out the EXTERIOR perimeter of the concrete base. Feel free to use the completed base platform as a guide. You can use stakes and string (see below).

2) Dig a trench at least 8" (200mm) wide by 6" (150mm) deep around the entire perimeter of the platform. You need to at least be able to align the outside edge of the platform with the trench below. The platform is going to "sit" on this concrete form.

3) Construct a wooden brace around both the exterior AND interior edges of the trench (as shown). Now would be a good time to get some threaded rebar at least $\frac{3}{8}$"Ø (14mm) at least 1'-6" (450mm) in length. Pour concrete into the trench between the wooden braces. Follow manufacturer instructions on mixing and pouring the concrete. Tamp the rebar THREADS UP at regular intervals down the center of the trench.

Make sure to use a level ensure the rebar runs straight vertically! It is OK if you aren't exactly equidistant just as long as each rebar piece runs close to the center of the platform's edge. Fill the concrete to the top edges of the braces and use water to smooth over the top.

4) This method may be a little unorthodox, but it sure is easy. After the concrete sets and the rebar is thoroughly set, lay the platform on top of the rebar, being square, it should sit easy enough. **MAKE SURE THE PLATFORM IS SQUARE**

5) Once the platform is square on the rebar, give it a good "WHACK" with a hammer or soft mallet, just enough to make a good indent on the wood where the rebar is located. Be sure to hit the board wherever it touches rebar or you will miss a piece!

6) Flip the platform structure over and you will see exactly where to drill through the structure to attach it to the rebar. Make sure your drill bit is just as big as the indent for a snug fit.

7) Lay a layer of sealant foam along the inside and outside edge of the platform structure and let dry.

8) Flip the structure back over and carefully align the holes with the rebar. You may need to smack the structure down to get a good, solid connection with the concrete below.

9) Using washers, anchor the structure to the concrete. Use a grinder to remove any excess rebar sticking up over the nut. If desired, use a torch to weld the nut and rebar together.

You can feel free to try and remove the wooden braces if you would like. It may take some hitting with a hammer or even a crowbar.

3-Dimensional Concepts
15725 S. Park Dr.
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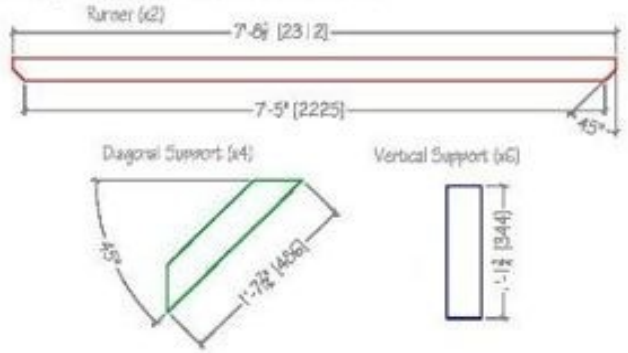
Cell: 406-347-6672

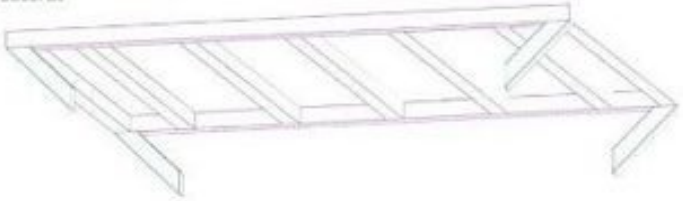
Title: Concrete Base	Drawn: JSG	Approved:
	Revision: 0	Drawing: 18
Date: 01-Mar-2010	Scale: Varies	

For those who wish to move the coop, the base will be constructed as detailed below. It is easiest to determine which side will be the top and which side will be the bottom. Tip the platform bottom-up and construct from the bottom of the platform up.

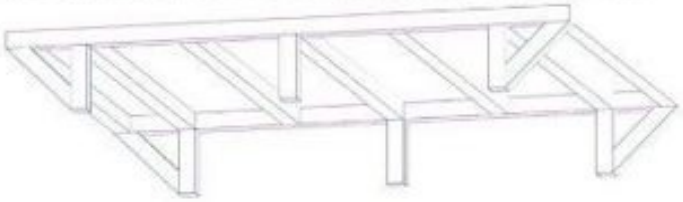
1) With your main platform constructed, you will need to cut the pieces detailed below. **All pieces are 4x4 (90x90mm) lumber.**



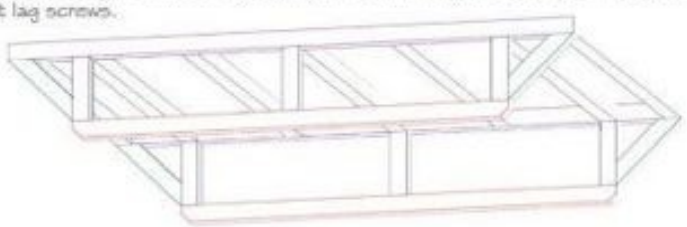
2) Attach the horizontal supports to the very exterior edges of the platform structure as shown below. Be sure they align with the LONG side of the structure.



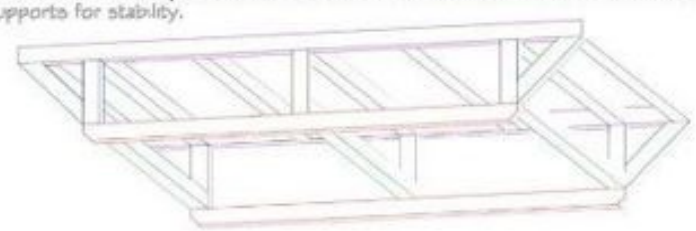
3) Attach the vertical supports to the end of the diagonal supports and through the top of the platform structure down into the vertical supports. Attach two vertical supports to the center of the long platform side as shown below.



4) Attach the sleds with lag screws. The sleds will hold the brunt of the force while the coop is in motion, you will want to use very heavy duty connectors if not lag screws.



5) **Remember those extra three short horizontal supports left over from the construction of the platform?** Attach those between the bottoms of the vertical supports for stability.



6) After you tip the structure back onto its top, this is what you should have up to this point.

3-Dimensional Concepts
15725 S. York Dr.
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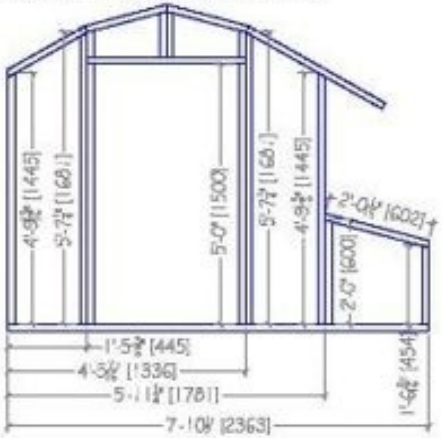
Cell: 406-546-6672

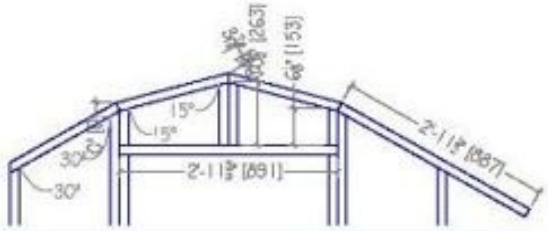
Title: Base Cont.	Drawn: JSG	Approved:
	Revision: 0	Drawing: 2
Date: 01-Mar-2010	Scale: Varies	

1)Once the platform structure is complete, use a circular or table saw to cut four (4) sheets of plywood into 4x5' (1200x1500mm) sheets. Set the 3x4' (1200x900mm) sheets aside for later.
2) Square up one corner of the platform with one of the sheets of plywood.
3) Repeat for remaining three sheets. The sheets should align in the center of the platform on the center support as shown below.

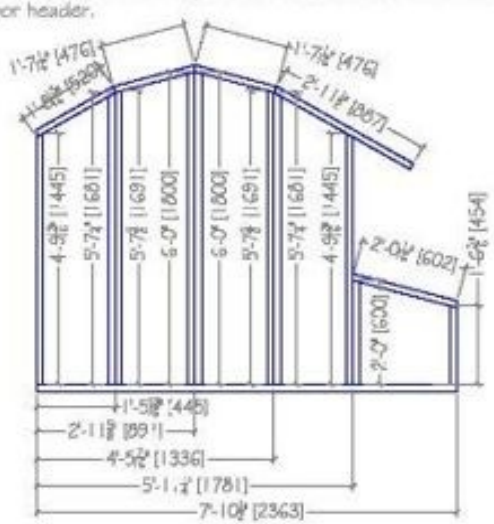
3) **This step is recommended but not required.** Attach a glass board veneer over the top of the sheeting. Follow manufacturer instructions carefully and be sure to drill into supports beneath plywood flooring.

4) Begin construction on the entrance wall as shown below. Be sure to cut carefully and wear safety equipment.





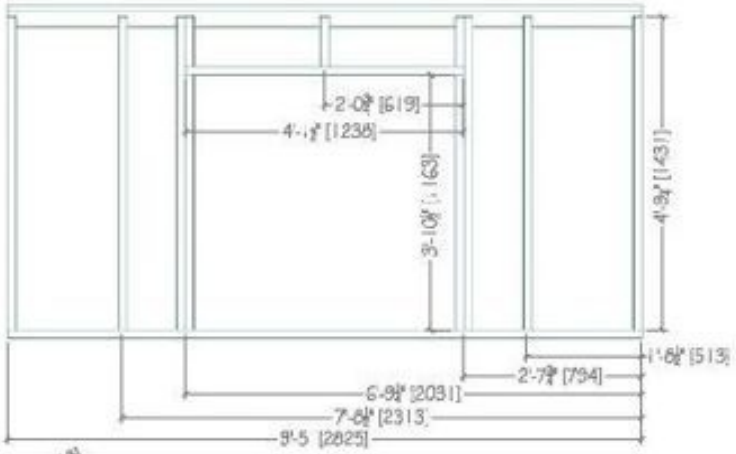
5) Now for the side wall. It is very much the same as the entrance wall but without a door header.



6) If you have noticed the wall is 1½" (35mm) short, this is because the nesting box front wall will be set on the front of the platform and we will need the space for the wall.
7) Align each of the walls with the rear of the platform and attach with screws. **We recommend against a nail gun because screws will give you a tighter hold AND nail guns may crack the glass board (if used).**

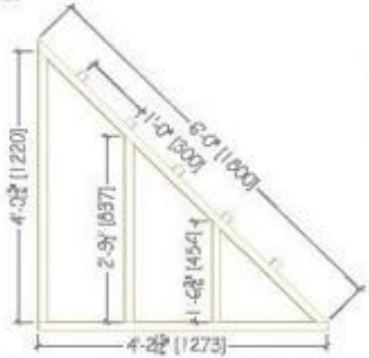
3-Dimensional Concepts		
15726 K. Park Dr. Brandywine, MI, USA 55554		Cell: 406-545-6672
Title: Decking & Entrance	Drawn: JSG	Approved:
	Revision: 0	Drawing: 3
Date: 01-Mar-2010	Scale: Varies	

8) For the rear wall, measure and cut planks as shown below. The sill is a 2x6 (45x150mm). You will need to use a circular or table saw to rip the end flush with the rear of the side wall supports.

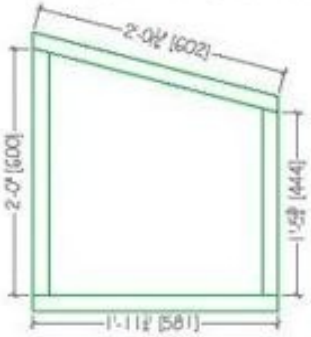


Make sure the top of the 2x6 (45x150mm) sill sits flush with the bottom of the sill plates on the side walls. You will add more rafters and need to attach them to the rear wall sill. This will ensure the sheathing is flat and even.

9) Now would be a good time to build and attach the roost structure. Start by ripping five (5) 10' (3000mm) 2x4 (45x90mm) planks down the center lengthwise. Assemble as shown below. Attach one side to the side wall and attach the other support structure flush with the inside edge of the user access frame.



10) For the nesting box, rip a 8' (2400mm) 2x4 (45x90mm) down the middle lengthwise. Assemble as shown below. Repeat this process for as many nesting boxes as needed. Space these at the minimum 12" apart. Spacing will be determined by the average size of fowl to be housed.



3-Dimensional Concepts

15725 N. Park Dr.
Frenchtown, MT, USA 59834
Cell: 406-546-6672

Title: Rear Wall & Nesting Box	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	4
Date: 01-Mar-2010	Scale:	Varies	

11) For the nesting box front panel you will need to start by determining what size and type of plywood sheeting you are going to use to sheath the exterior and enclose the structure. We recommend ½" (13mm) oak plywood as it is strong and weather resistant.
12) Router down the center length of two (2) 10' (3000mm) planks on end (we recommend a guard) and a 6' (1800mm) plank on end (as shown below). Make sure the router matches the width of the plywood to be used. If the bit is too large, the plywood will shift around in the gouge. If the bit is too small the plywood won't fit.
13) Miter the ends and make sure they come together as shown below.

14) You should have a small piece of the 6' (1800mm) piece left with a gouge in one side. Measure and cut the ends square as detailed above. Router down the center of the opposite end so you have a piece with two gouges.

15) Cut a sheet of plywood into two (2) sections as shown below.

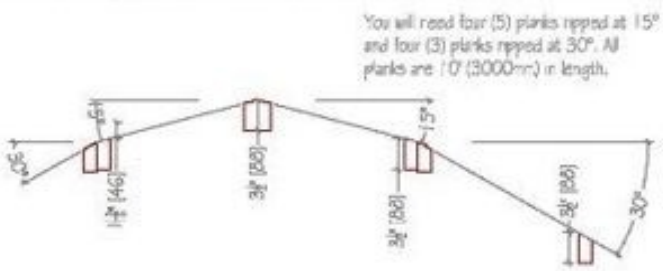
16) Without glue or attachments, assemble as shown below. Do NOT attach until you are certain the pieces will come together snugly.
17) If the pieces fit together and everything looks good, go ahead and run a bead of glue down each gouge and assemble all of the pieces to form the front panel shown below. We recommend allowing the glue time to dry before attaching with screws as a nail gun can break the oak plywood. Also, drill pilot holes for the screws, you will only have one shot at getting the screw in the right place. Hold the drill straight up or sideways and drill straight into the plywood sheet from the outside.

17) So far, the structure should start coming together as shown below. If you want to open the front panel DO NOT attach it to the structure. We are going to make it so the user can clean the nesting boxes easily. If you do not want the front panel to open, go ahead and attach it to the structure.

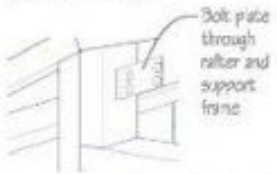
3-Dimensional Concepts
15725 N. York Dr.
Prendstown, MT, USA 59684
Cell: 406-3[illegible]5-6672

Title: Nesting Box Front Panel	Drawn: JSG	Approved:
	Revision: 0	Drawing: 5
Date: 01-Mar-2010	Scale: Varies	

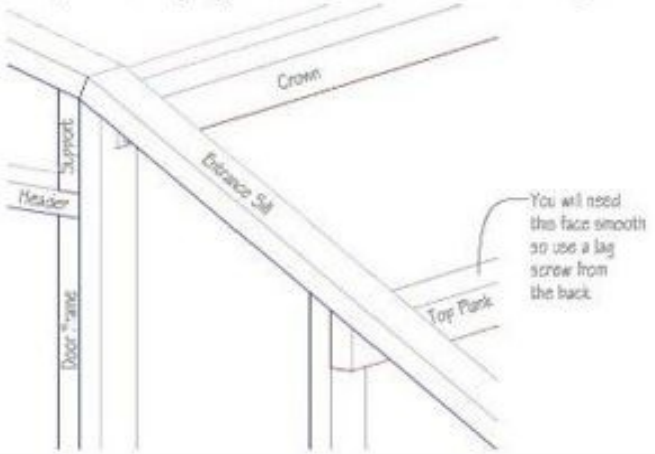
18) You will need to rip boards as shown. The pitch of the angle will be determined by the pitch of the roof it is going to support. If the plank is going in between a 15° pitch, you need to rip the end at 15°, same fore 30° (see below).


You will need four (5) planks ripped at 15° and four (3) planks ripped at 30°. All planks are 10' (3000mm) in length.
30°
1½" (46)
3½" (88)
15°
3½" (88)
3½" (88)
30°

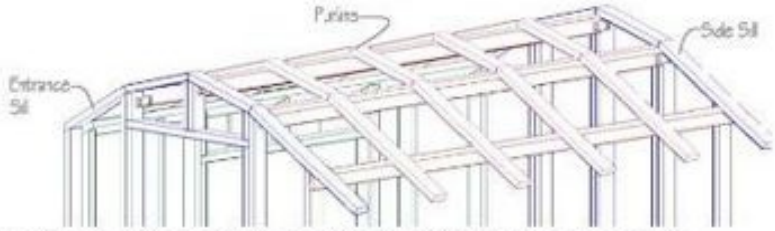
19) Place the rafters in place as shown above (inside the side supports). You can use 5" screws, but, if you want a really strong structure, use a metal plate and bolt the rafters through the rafters and through the side supports. You may even use two plates and bolt completely through.



Also, be careful around the front crown. If you do decide to use bolts and plates use lag screws through the frame and crown. You will need a smooth face and you are also going to use the front rafter as a front wall plank.



20) Cut purlins EXACTLY as those cut for the side and entrance wall sill plates. Center them at 2' (600mm) across the top of the rafters as shown below.



21) Now, we need to complete the front wall. You should have had one 10' (3000mm) plank left over from the rafters. Flip this one over and set it on top of the nesting box framework.

Now would be a good time to think about windows for the coop. We have included diagrams on building your own basic windows with vents. If you wish to purchase a manufactured window, follow all manufacturer instructions for installation.

3-Dimensional Concepts
15725 S. Park Dr. Cell: 702-542-6272
Friendtown, MT, USA 59834

Title: Roofing and Front Wall	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	6
Date: 01-Mar-2010	Scale:	Varies	

For the windows, we are going to build a custom window size. WARNING: Always use protective equipment when cutting or breaking glass. Use caution with all glass panels to prevent breakage. Lay glass panels in safe, dry place until ready to use.

1) Cut a 10' 2x4 (45x90x3000mm) plank as shown below. All corners are mitered at 45°. You will need two (2) of these sill frames.

Go ahead and glue all of the corners and screw or nail together. Just make sure the frames are square and all edges are flush!

2) Rip a 10' 2x4 (45x90x3000mm) down the center using a table saw or circular saw with a guard. You will end up with two (2) 10' (3000mm) planks that are about 1½"x1¾" (37mmx44mm)

3) Cut each piece as shown below The pieces should just fit inside the frame built earlier.

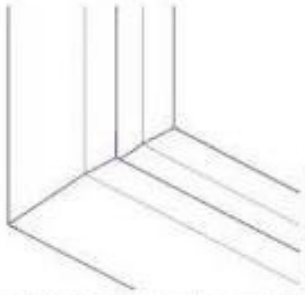
4) Cut a sheet of screen large enough to overlap the edges of the frame roughly by half.

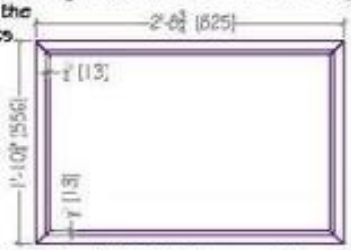
5) Make two (2) of these vent frames.

6) Rip another 10' plank in half just like for the vent frames. You will need a router with a guide or a table saw with the applicable attachments.

7) Router a ½" (13mm) gouge down the center of each piece. Be sure you router the entire piece BEFORE cutting to length as shown. This will ensure a continuous gouge the entire length of the window frame.

8) Place the glass sheet (you don't need to use glass (feel free to substitute any clear material such as PVC or plastic) into the frame and check to make sure the frame fits around the pane snugly.





We have allowed ½" (6-7mm) of clearance. Make sure the window swings freely. Before Gluing or assembling the window check to make sure the swing is unimpeded. DO NOT ATTACH THE VENT OR THE WINDOW TO THE FRAME YET, YOU STILL NEED TO ATTACH THE FRAME TO THE FRONT WALL!

9) Run a bead of silicone sealant (or equivalent) down the length of each gouge and glue the ends together around the pane.

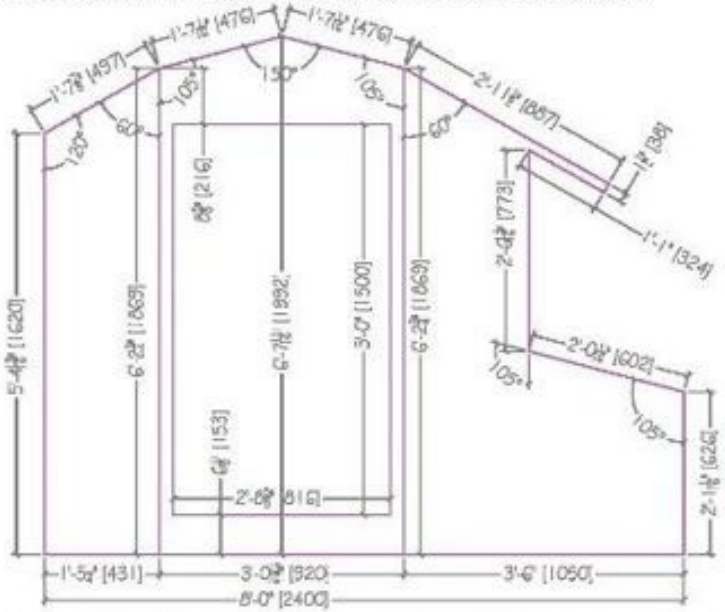
10) Allow to set before attaching with screws or nails. We recommend screws, as pneumatic nails can break the seal. ALWAYS use extreme caution to ensure the screws or nails go straight into the frame. Make sure you do NOT impact the pane material as such may cause cracking or breakage.

11) You will also need two of these windows. We recommend working on one at a time to ensure the correct frame pieces do not get mixed up.

3-Dimensional Concepts
15726 S. Park Dr.
Fremdtown, MT, USA 59834
Cell: 406-542-6672

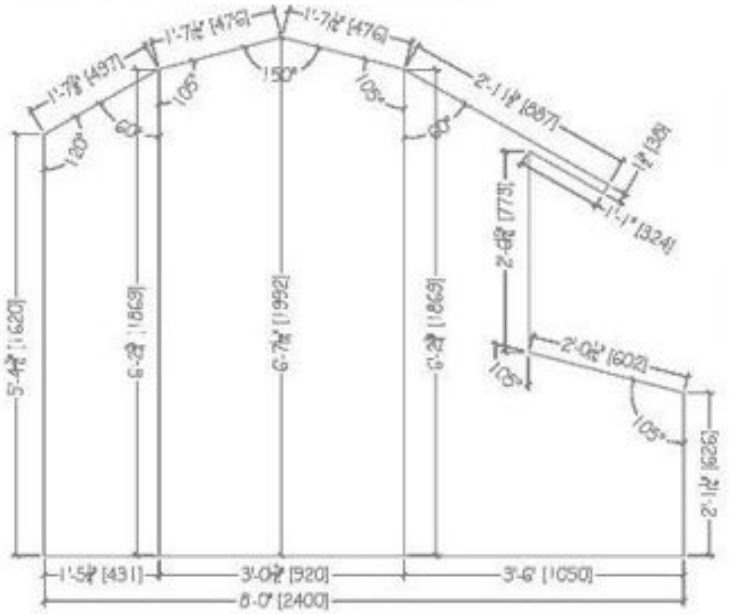
Title: Windows		Drawn: JSG	Approved:
		Revision: 0	Drawing: 7
Date: 01-Mar-2010		Scale: Varies	

22) Now to begin with the sheathing. We started with the side and entrance because they are very similar. NOTE: When you layout the entrance, make sure your saw blade cuts INSIDE the line for the door area, the width of the saw blade will add up all around the perimeter and allow you to close the door. KEEP this sheet as your door panel. Label and mark so you don't accidentally cut it.



LAYOUT EACH SHEET CAREFULLY, it's an awful lot of waste if you do not. VERIFY EVERY DIMENSION!. Make sure edges are square and flush.

23) The side sheeting is MUCH the same as the entrance, only no door. IF YOUR NESTING BOX OPENS, DO NOT ATTACH TO THE NESTING BOX PANEL. ATTACH THE SHEETING TO THE NESTING BOX FRAME!

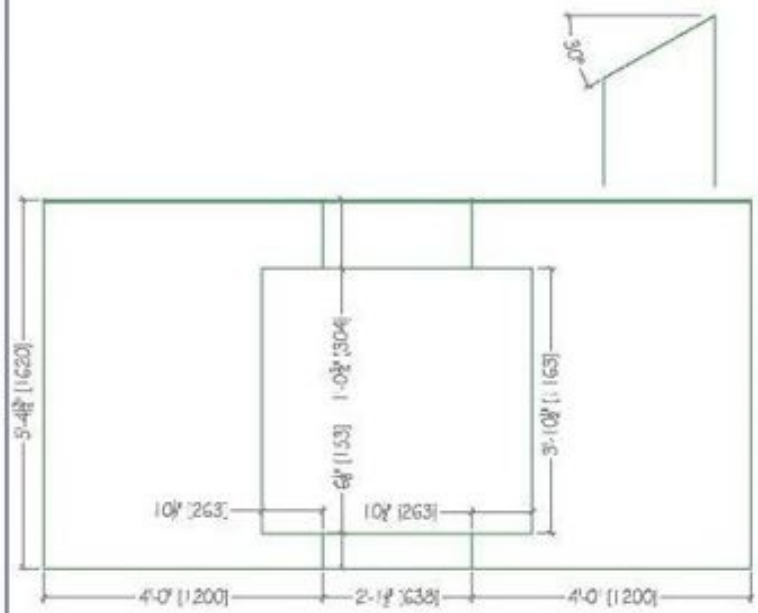


3-Dimensional Concepts

15725 S. Park Dr.
Frankfown, MT, USA 59634
Cell: 406-314-6672

Title: Side Wall Sheathing	Drawn: JSG	Approved:
	Revision: 0	Drawing: 8
Date: 01-Mar-2010	Scale: Varies	

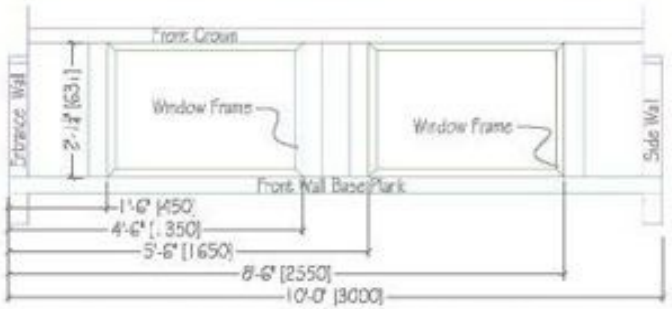
24) The rear sheeting is pretty simple compared to the side and entrance sheeting. You may want to use scraps from the side and entrance sheeting.
MAKE SURE YOU DON'T USE THE ENTRANCE DOOR PANEL! Notice the top of the sheeting needs to be angled to flush with the pitch of the roof, this will make sheeting the roof MUCH easier, don't forget this step!



LAYOUT EACH SHEET CAREFULLY, it's an awful lot of waste if you do not. VERIFY EVERY DIMENSION!. Make sure edges are square and flush.

Now we need to finish the front wall before you put the sheathing around the front. You should already have your window frames constructed so here we go...

25) Measure and locate where you want to put the windows. Feel free to adjust the measurements provided but remember you will need to adjust the measurements on the front wall sheathing.
26) Cut the window frame planks and attach them to the front wall with 5" (125mm) screws. Be sure to crew through the crown and the base plank into the frame supports. MAKE SURE THE SUPPORTS ARE STRAIGHT VERTICALLY. We recommend having an assistant hold the window frame in place before attaching any screws.



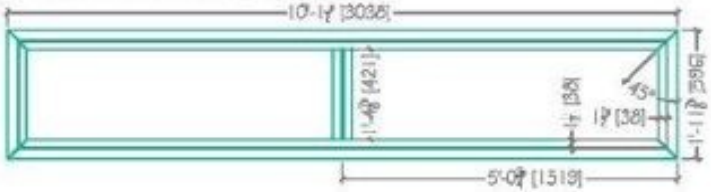
27) Attach the vent through the rear of the front wall. YOU may have to use a soft mallet or dead-blow hammer to "tap" the screen into place. It should be a snug fit. Attach with nails or screws up through the front of the frame. Make sure the screen frame is flush with the rear face of the window frame.
28) Use hinges to attach the window. Which side is up the the builder. If you attach the hinges to the top, you will need some type of support system to keep the windows open. We recommend attaching the hinges on the side and using a slide pin or hook and eye-pin to latch.

3-Dimensional Concepts
15725 S. Park Dr.
Fremdtown, MT, USA 59834
Cell: 406-546-6672

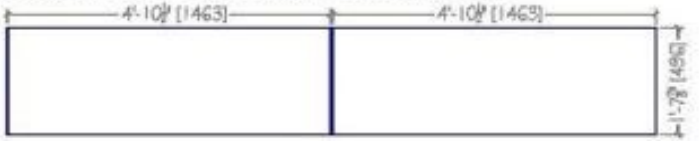
Title: Front and Rear Sheet	Drawn: JSG	Approved:
	Revision: 0	Drawing: 9
Date: 01-Mar-2010	Scale: Varies	

1) For the nesting box lid, you will have to pull out the router or table saw again. Router 3 10' (3000mm) planks or end.

2) Miter then ends as shown below and make sure all piece fit together and grooves line up. It is just like the windows and the nesting box front pane.

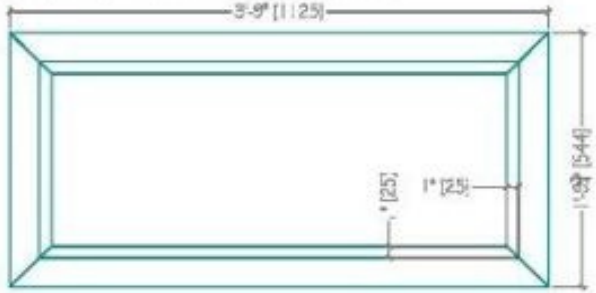


3) Use a plywood sheet to cut out two interior panels cut as shown below.



4) Assemble the lid in the same manner as the front panel. Run a bead of glue in the grooves and assemble the frame around the panel. Allow the glue to dry before screwing or nailing.

1) Since you have the router or table saw set up, why not work on the rear door also? Begin by setting the router or saw blade to 1" deep. you will need two (2) 12' (3600mm) planks. As before, rip each plank separately and label to avoid mixing pieces up.



2) Cut two panel sheets from a plywood sheet as shown below.

3) Check the pieces and make sure they come together as shown below. If everything is in order, run a bead of glue down each of the grooves and assemble around the panel as before. Repeat this process for the second side of the door.

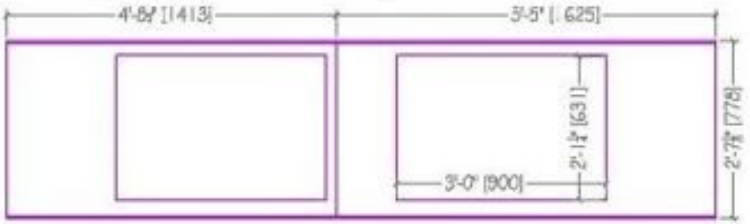
3-Dimensional Concepts

15725 S. York Dr.
Frankfort, MI. USA 59634

Cell: 406-541-6672

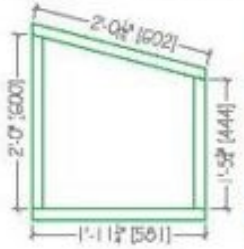
Title: Rear Door and Top Panel	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	10
Date: 01-Mar-2010	Scale:	Varies	

31) You will need to MEASURE all openings and make sure the dimensions are accurate. Layout and Cut two (2) sheets of plywood as shown below.

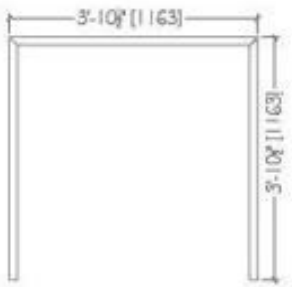


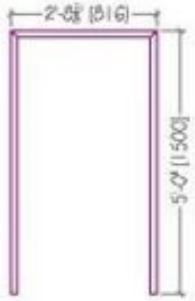
Don't forget to measure and cut the miter on the plywood sheets so they fit snug into the space provided. You should be able to "tip" the sheets into place around the window frames.

32) You should probably cut some nesting box dividers and attach them to the nesting box frames before we get too far.



33) Now let's work on the frames for the doors. These are simple compared to some you have already done. Simply miter 2x6 (45x150mm) planks as shown below.





34) Attach the door frames with ¾" (25mm) overhang. You will end up trimming the outside and the overhang will stick out the width of a 1x4 (25x90mm) plank. Use a piece of 1x4 (25x90mm) to get the correct overhang as shown below.

3-Dimensional Concepts

15726 K. Park Dr.
Frenchtown, MI., USA 48074
Cell: 406-545-6672

Title: Dividers and Frames	Drawn: JSG	Approved:
	Revision: 0	Drawing: 11
Date: 01-Mar-2010	Scale: Varies	

35) First thing you are going to want to do upon completion of the nesting box lid is miter on edge so it sits flush with the wall when closed (see below).

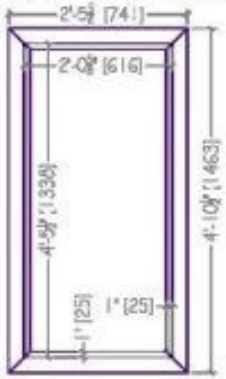
If you wish use a ¾" (19mm) thick piece of weather tape to cushion the lid. The weather tape should absorb any of the lip and keep the nesting box weather tight.

36) Attach hinges to the exterior of each of the rear doors and hang in place on the rear door frame. Use a slide bolt on top and bottom to keep the doors locked in place. If you wish, you may also install the slide pins vertically on the inside top and bottom. Use a drill to drill a hole for the slide pin to anchor the door closed.

Make sure the doors sit flush with the frame. Attach handles as desired.

If you are going to let your chickens run out of the coop run, you may put a slide bolt in the center so you can just open the doors to let them out and slide the pin to close them in.

37) One more time, use a router with a guide or a table saw to rip a groove down the center edge of a 14' (4200mm) plank. Cut the entrance door frame and panel as shown below. Assemble in the same manner as rear doors.



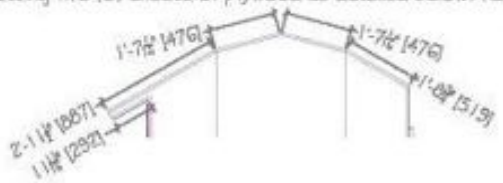
38) Attach hinges to the door frame and hang in the entrance frame. We have allowed ½" swing to allow the door to swing freely. Apply a strip of weather tape to all sides of the door frame to ensure a weather-tight seal.

Hinge and handle style are up to the builder. We recommend either a slide pin or a hook and eye-pin as a latch to keep the door closed.

3-Dimensional Concepts
15725 S. Park Dr. Cell: 406-547-6672
Frenchtown, MT, USA 59834

Title: Doors	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	12
Date: 01-Mar-2010	Scale:	Varies	

39) You are nearing completion on your new coop. It is time to sheath the roof. Start by cutting five (5) sheets of plywood as detailed below. Keep both sides.



You can really sheath how you wish, but for a little guide we have numbered the detail below to show where sheathing can go to reduce the amount of waste.

4	4	4
3	2	1
3	2	1
3	2	1

2'-1½" [638] — 4'-0" [1200] — 4'-0" [1200]

Now, all you need is a 1x4 (25x90mm) plank to put across the top, front of the overhang. Also, the roof should be strong enough to support most snow loads, but if you live in a high elevation area, add some braces to the overhang on the front. These are detailed in the following pages.

IF YOU ARE INTENDING ON ADDING TRIM, DO NOT ATTACH ANYTHING TO THE FRONT OF THE OVERHANG! TRIM WILL BE DETAILED IN THE FOLLOWING PAGES!

40) Now, for all intensive purposes you are done with the coop! Congratulations! We have included a list of trim pieces that will enhance the look and overall aesthetics of the coop. Those are continued on the next page but NOT REQUIRED.

Some general notes:

1) These drawings are intended as a guide ONLY. While the drawings are complete and may be followed carefully, you should ALWAYS check measurements to confirm. Saw blades vary in thickness with age, lumber thickness can vary by country or standard. Too many variables exist, not to mention the construction competency of the builder.

2) While these plans are written with the most basic steps laid out, some builder competency is expected. Especially with the trim as the pieces need to be tailored very specifically to fit just right. You also need to know how to use your own tools and to know what types of tools are listed in these drawings.

3) The chicken access, for all purposes is the rear door. We will be installing a smaller access in the rear of the coop, but this is up to the builder and is NOT REQUIRED.

4) Ramps and chicken runs are simple structures but drawings are included in the following pages.

Don't forget the brace in the front. Simply hold a 3-4' (900-1200mm) plank against the side and mark your cuts.

3-Dimensional Concepts
15725 S. Park Dr.
Frenchtown, MT, USA 59834
Cell: 406-544-6272

Title: Roof Sheathing	Drawn: JSG	Approved:
	Revision: 0	Drawing: 13
Date: 01-Mar-2010	Scale: Varies	

Links to Download **Chicken coop 6**

Material List

Description	Dimensions mm	Dimensions Imperial	Quantity
Sill, Supports and Roof Sill			
Sill & Roof Sill Side Plate	25x90x1800	1x4x6'	4
Sill & Roof Sill End Plate	25x90x1200	1x4x4'	4
Support	25x90x1200	1x4x4'	6
Sheathing	19x1200x2400	4'x8'sht	3
CMU Spacer	Varies	Varies	Varies
Nesting Box			
Nesting Box Side Plate	25x90x1200	1x4x4'	4
Nesting Box End Plate	25x90x600	1x4x2'	4
Nesting Box Sheathing	19x1200x2400	4'x8'sht	1
Doors			
Door 1/2 Top & Bottom	25x90x1200	1x4x4'	8
Door 3/4 Top & Bottom	25x90x600	1x4x2'	8
Door Stiles	25x90x1200	1x4x4'	8
Hinges	By Builder	By Builder	12
Mesh or Chicken Wire	By Builder	By Builder	1
Dowel (Perch)	30 x 1800	2'0 x 6'	1
Roof			
Roof Crown Plates	45x90x1800	2x4x6'	2
Roof Sheathing	19x1200x2400	4'x8'sht	2
Hinges	By Builder	By Builder	6
Misc			
#20-#30 torque screws	35-40mm	1½"	150
Caulk			2
Misc Hinges	By Builder	By Builder	3

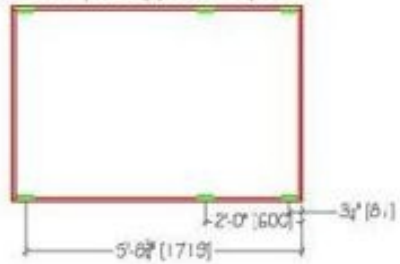
3Dimensional concepts
15726 N. Park Dr.
Frenchtown, MT, USA 59834
406-546-6672

Title: Materials	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	0
Date: 21-May-2009	Scale:		

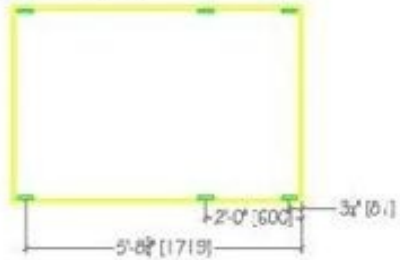
Instructions:

1) Arrange two (2) 4' boards and two (2) 6' boards as shown and screw together with #20x1 ½"-2" (40-50mm) torque head screws.

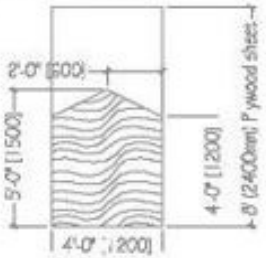
2) Repeat step 1 for coop roof sill.
3) Attach six (6) 4' (1200mm) planks as detailed below in green. Attach with #20-#30x1" (25mm) screws. Leave ¾" (19mm) for the sheathing on both ends. Use a piece of plywood as a spacer.



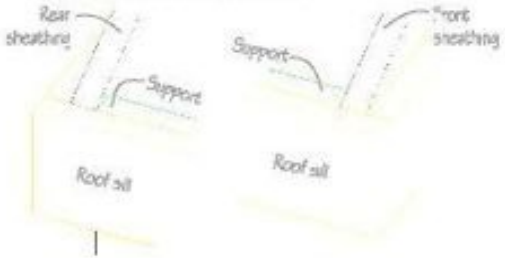
4) Flip the structure over and place inside the second frame built in step 2). Arrange to accommodate space for the sheathing and attach with #20-#30x1" (25mm) screws. Use a piece of plywood as a spacer.



5) Now, we need to add rigidity to the structure.
6) Stack three (3) ¾" (19mm) plywood sheets on top of each other, make sure edges are flush and the stack is square. Anchor the sheets with clamps so they cannot move.
7) Use a pencil to layout the cuts as diagrammed below:

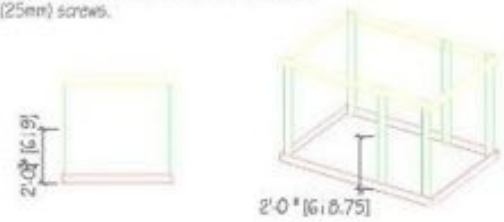


8) Use a circular saw to cut all three sheets at once. Be sure to adjust the clamps accordingly to prevent kickback!
9) Slide front and rear sheathing into place in the designated spaces as shown below.

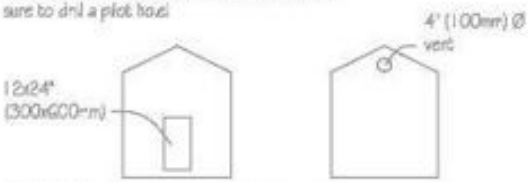


10) Attach sheathing to roof sill with #20-#30x¾" (25mm) screws at 6" (150mm) intervals.

11) Mark where the nesting box will be attached as detailed below and attach with #20-#30x1" (25mm) screws.

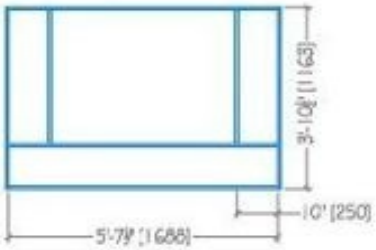


12) Once the plywood sheets are attached, use a jigsaw to cut out the door in the front sheet and the vent in the rear sheet as detailed below. Be sure to drill a pilot hole!

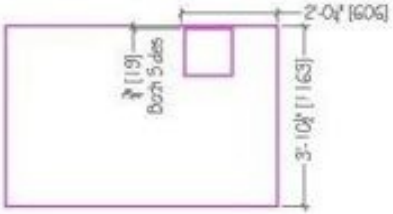


13) Attach hinges to the cut pieces to use as a door and a vent cover. At this point, the structure should look similar to this:

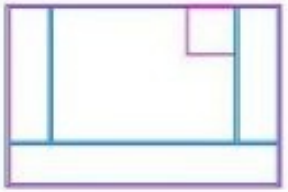
1) To make the nesting box, cut boards as diagrammed below and attach with #20-#30x1 ½" (40mm) torque head screws. Make sure edges are flush and structure is square.



2) For the base cut a plywood sheet to the dimensions below. Layout but DO NOT CUT OUT the access shown...yet.



3) Attach base to nesting box frame with #20-#30x1 ½" (40mm) torque head screws. Make sure corners are square and edges are flush.

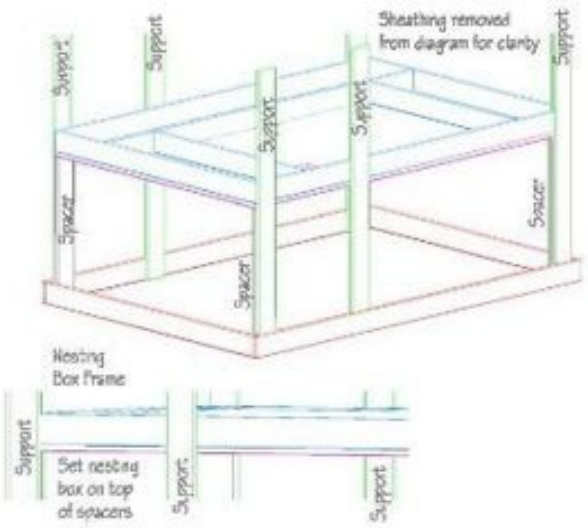


4) Use a jigsaw and cut along the pattern diagrammed in step 2 to cut out the access. Be sure to drill a pilot hole and leave the a lip to rest the access ramp on.

5) Up to this point, the nest box should look similar to the diagram below.

6) Now, it is really the builder's choice on how to put the nesting box in place. The builder have an easy start hold the box in place and attach one side while ensuring the structure is level.
We recommend cutting four spacers to support the weight of the nesting box. If the box is still off-level because of an un-level work surface, minor adjustments can be made by lifting one side or the other and attaching at level (see diagram).

Spacer Diagram

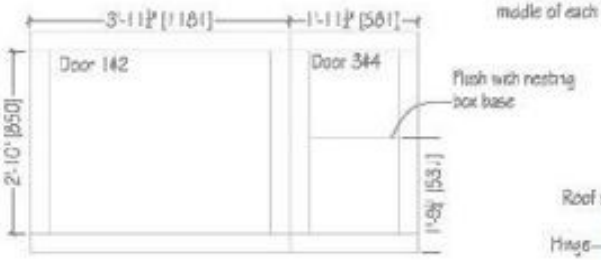


7) Attach 10"x10" (250mm x 250mm) scrap pieces of plywood at least 10" (250mm) apart for nesting boxes. It is up to the builder to place the nesting box panels dependent upon the size of the fowl nesting. The setup below is designed for up to 10-12 chickens you may have to adjust the placement of the panels depending upon your personal requirements.

8) Up to this point, the coop should look something like the diagram below.

"NOTE" For this example, we are going to add doors to the coop. The builder may wish to attach the sides permanently and simply move the coop as it does not weight too much. For those who wish to attach the doors as side walls, follow the instructions on the door construction up to step 5. Eliminate the hinges and attach the panels solid with #20-#30x1" (25mm) torque screws.

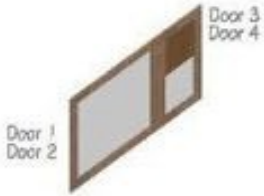
1) Once the nesting box is in place, we can begin construction on the doors. Begin by laying out the boards for the doors as shown below (2 doors each for a total of 4 doors).



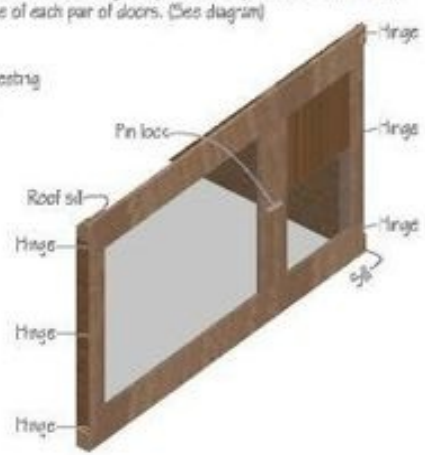
2) Clamp boards for each door and attach boards with #20-#30x5" (125mm) torque head screws. Be sure to drill straight into the board to prevent breaking through.

3) Cut two (2) pieces of plywood to match the diagram below. Attach to small door frames with #20-#30x 5" screws as shown.

4) Cut chicken wire and staple around the open edges of the doors so they look like the diagram below.



5) Attach 3 hinges to the outside edges of each door (1 top, 1 middle and 1 bottom). Attach to the coop frame with screws and make sure doors swing freely. Attach a pin and bolt lock in the middle of each pair of doors. (See diagram)



6) Before we get to the roof, we need to add a 2" (50mm) dowel down the middle of the nesting area for a perch (by builder). Simply measure and cut the dowel and attach with 2-#30x1½" (35-40mm) torque screws on each side. Be sure to use a level.
NOTE: If you want a stronger hold, use a forstner bit and countersink a 2" (50mm) hole in the sheathing on both sides. Use a level and mark the location of the countersinks while an assistant holds one end of the dowel.
In this example, we placed the perch off to one side, but it is really up to the builder to decide where it may be most convenient.

7) Up to this point, once the doors are attached, the coop should look similar to the diagram below.

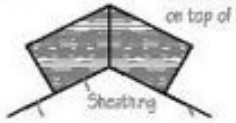
1) Up to this point, the coop should look similar to the diagram below.

2) Now you are ready to install the roof of the coop. If you wish, you may attach the roof solid but for these purposes, we are going to allow access through the roof.

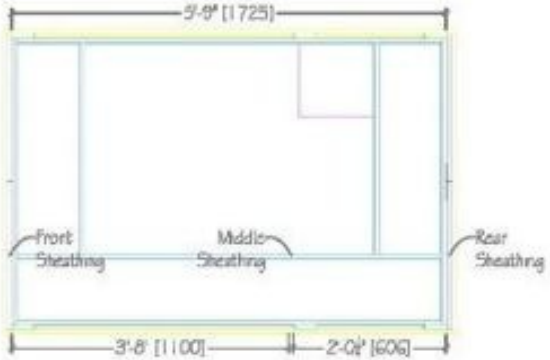
3) First, lay a 6' (1800mm) board across the top of the coop sheathing with enough overlap so the you can mark a line straight down the roof line (see diagram). Using a circular saw or table saw, rip the board length-wise using your cut line as a guide.

4) Repeat step three for the second roof joist. It is not necessary to have the pieces be perfectly mirrored as you are just looking to have a crown that is flush with the angle of the sheathing to provide nailing surface. **If you wish to exactly mirror the first piece cut, simply lay the boards end to end and mark your original cut onto the second plank and cut as described in step 3.**

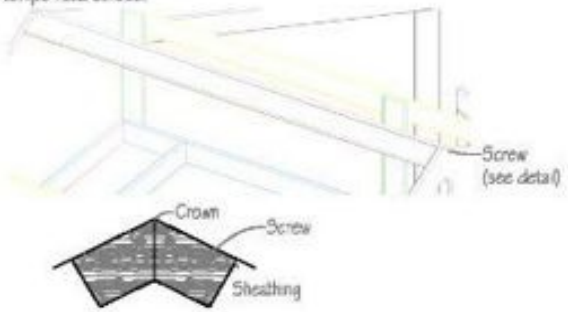
5) When completed the two planks should form a nice peak and sit flush on the top of the sheathing when placed cut-side together as diagrammed below.



6) Measure the space between the rear and front sheathing. If you followed these directions carefully, the measurements will be the same as diagrammed below. Cut the angled planks to fit.



7) With assistance, hold any end of the cut planks flush with the roof. Have a helper hold the other end flush with the slope of the roof in the center. Screw through the outside sheathing in toward the plank using #20-#30x2" (50mm) torque head screws.



8) Take two sheets of plywood and clamp them together. Use a table saw or a circular saw to cut them both to 2'-3" x 6'-0" (671mm x 1800mm). These will be the roof sheathing (see next diagram at top right).

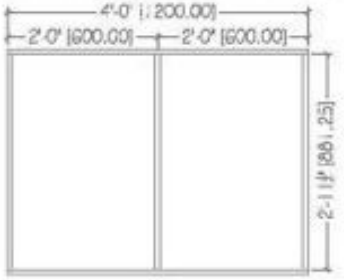
9) Cut the sheathing to the dimensions below. Attach a hinge to each end of each board (4 total). Use caulk to seal connections from moisture intrusion.

10) The completed coop should look something like the diagram below. Make the ramp with scrap plywood and pieces of lumber as steps.

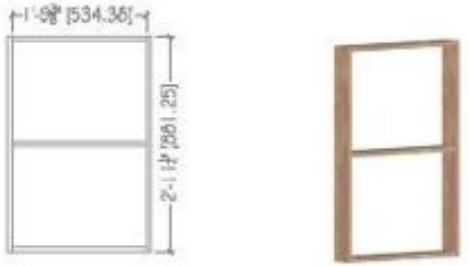
For all intensive purposes, the coop is completed. This page is for those who wish to build a door into the coop to allow free-roaming and for the building of the rampart should the builder want to build one instead of purchase one.

1) The rampart is without doubt, the easiest item to build for the coop.
2) Use a long scrap of plywood at least 1 x5' (300x1500mm) and attach strips of 1x4 (25x90mm) spaced in half as steps.
3) Angle into the coop and screw through ramp to solidify. *HINT* Use a hinge, 2 eye-hooks and a tarp strap (or equivalent) to turn the ramp into a "drawbridge" to keep chickens inside or to assist with moving the coop. Simply hinge the ramp to the opening in the the nesting box floor and set eye-hooks far apart enough to strap the ramp up against the bottom of the nesting box floor.

1) Here is the same diagram as seen on page 1. It is the structure for the front and rear walls.



2) If you want to include a chicken access, simply cut and attach parts as shown below.

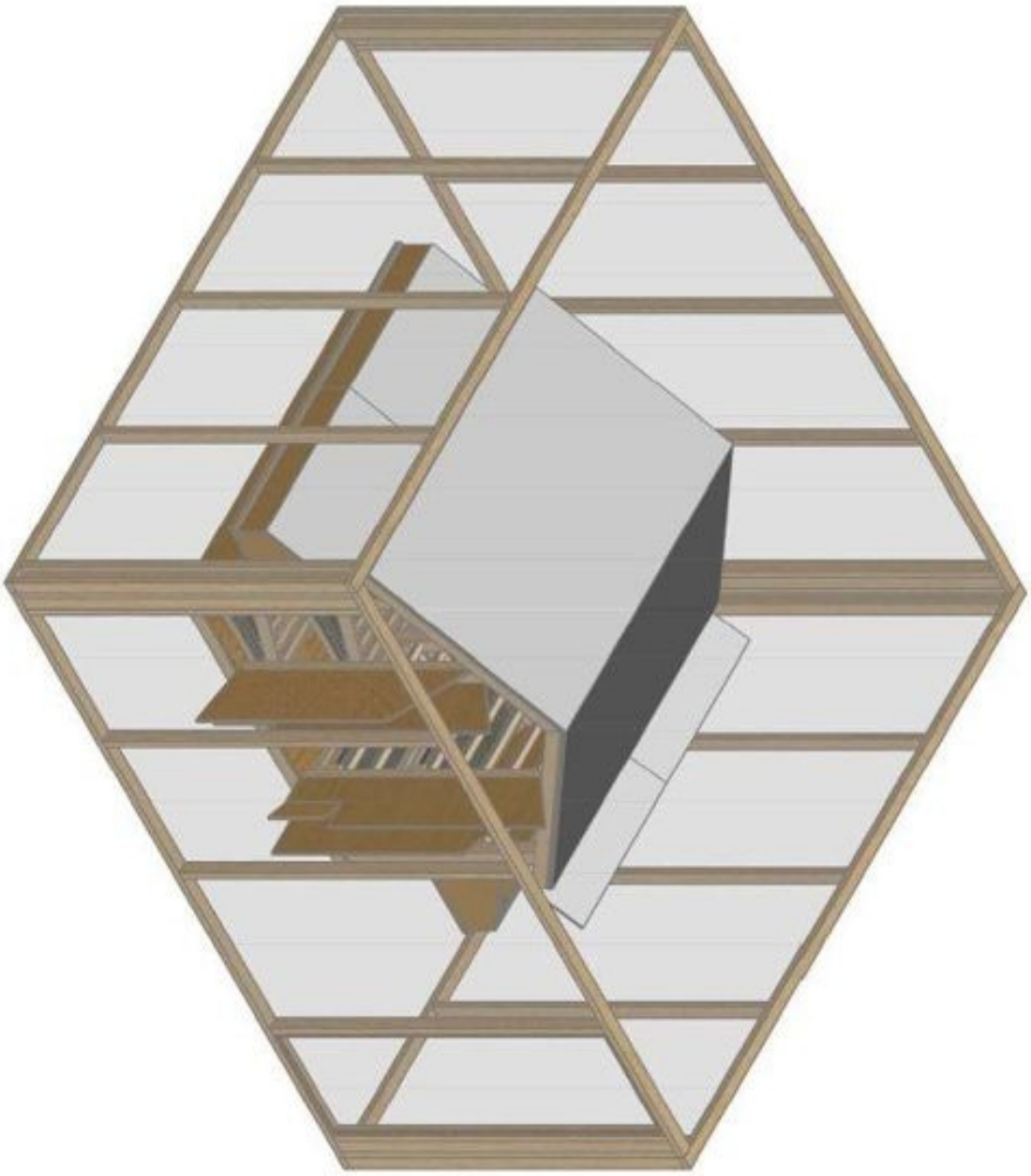


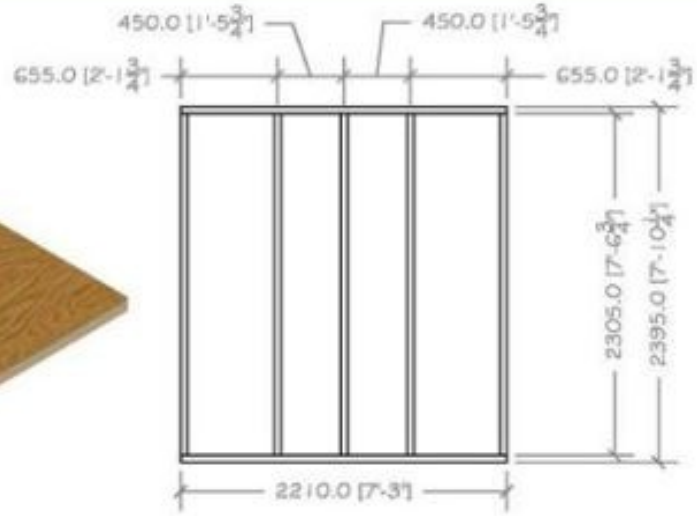
3) Attach frame to base with hinges and a hook and eye-pin to keep the door locked when not in use. Measure and cut mesh as described in step 5, sheet 1.
4) Continue with step 6, Sheet 1.

3Dimensional concepts

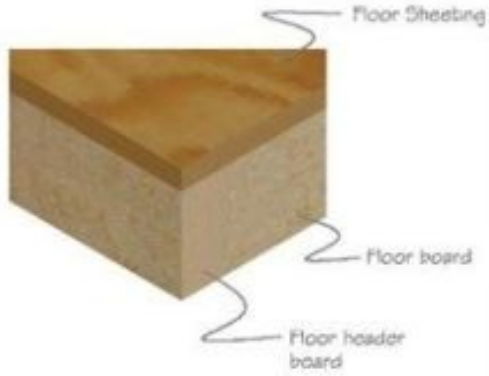
Title: Miscellaneous	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	5
Date: 16-Feb-2009	Scale: Specified		

Links to download **Chicken coop 10**





NOTE: Floor boards are treated 45x90 attached with #20-#30x60-70mm torque screws.



Floor Detail

Scale 1:1000

INSTRUCTIONS:

1) Measure and cut floor header and floor boards.
2) Lay out floor header boards and mark location of floor boards.
3) Attach floor boards to header board using #20-#30x60-70mm torque screws (or equivalent). Make sure edges are flush.
4) Cut and measure plywood floor sheets.
5) Square floor structure and lay floor sheets on top.
6) Tack with #20-#30x60-70mm torque screws straight down.
7) Make sure edges are flush and structure is square.
8) Once structure is square and edges are flush, attach sheet permanently with screws or nail gun.

Notes:

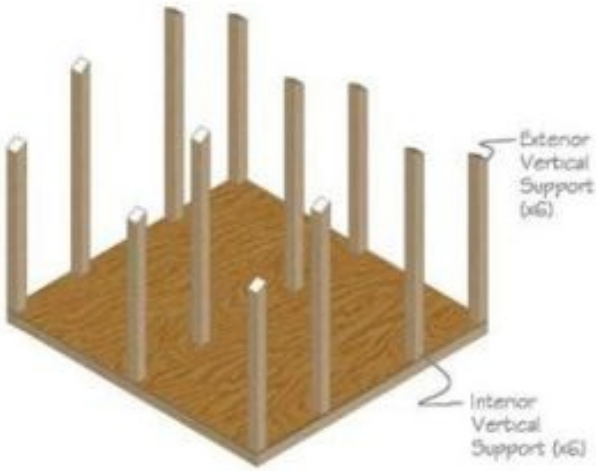
1) These drawings are intended as a construction guide.
2) Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.
3) Always measure dimensions carefully and label each piece individually.
4) Number of pieces are marked below each detail.

Material List

Description	Dimensions mm	Dimensions english	Quantity
Floor Header Board	45x90x2400	2x4x12'	2
Floor Board	45x90x2400	2x4x12'	5
Floor Sheeting	1200x2400x19	4'x8'	2

3D imensional concepts
15726 N. Park Dr.
Frenchtown, MT, USA 59834
Cell: 406-546-6672
Phone: 406-626-4522

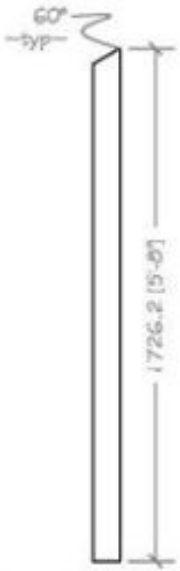
Title: Poultryman Floor Slab Details	Drawn: JSG	Approved:	
	Revision: 0	Drawing: 1	
Date: 19-Jan-2009	Scale: Specified		



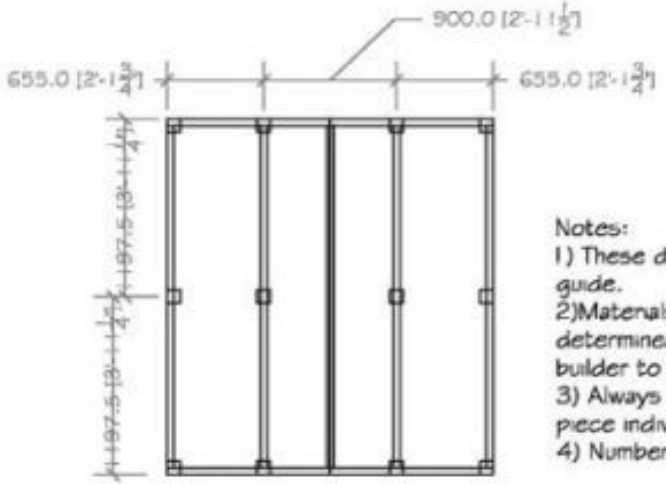
INSTRUCTIONS:
1) Layout and mark location of support posts as detailed.
2) Measure, cut and label support posts.
3) Layout posts and make sure each post is located properly.
4) Attach posts to floor sheet using angle brackets and #30x15mm screws, or drill holes and use bolts and washers (by builder). Make sure posts are flush, level vertically, and faced as shown at left.

Note: All supports are 90x90mm

Interior Support Details (x6)
Scale 1:500



Exterior Support Details (x6)
Scale 1:500



Support Layout
Scale 1:1000

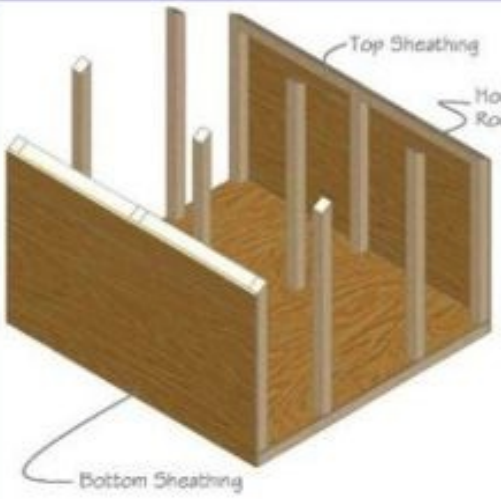
Notes:
1) These drawings are intended as a construction guide.
2)Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.
3) Always measure dimensions carefully and label each piece individually.
4) Number of pieces are marked below each detail.

Material List

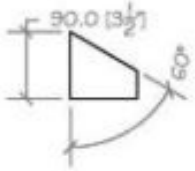
Description	Dimensions mm	Dimensions english	Quantity
Interior Vertical Support	90x90x1500	4x4x5'	6
Exterior Vertical Support	90x90x1800	4x4x6'	6
Angle bracket	By Builder	By Builder	35

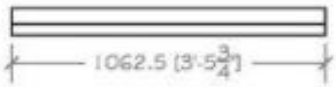
3Dimensional concepts
15726 N. Park Dr.
Frenchtown, MT, USA 59834
Cell: 406-546-6672
Phone: 406-626-4522

Title: Vertical Support Layout Details	Drawn: JSG	Approved:	
	Revision: 0	Drawing: 2	
Date: 19-Jan-2009	Scale: Specified		



Note: Horizontal Roof Support is 90x90mm

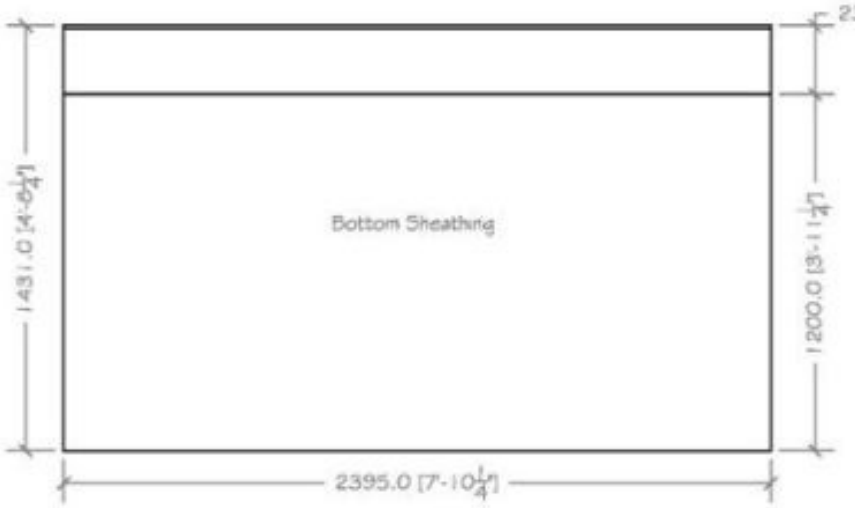




Hor. Roof Support

Scale 1:500

INSTRUCTIONS:
1) Brace support posts vertically
2) Measure and cut horizontal roof supports. Rip top edge at 60°.
3) Attach to top of exterior support posts using angle brackets and #30x40mm torsion screws. Make sure angle is flush with support posts.
4) Measure and cut two (2) exterior plywood sheets.
5) Layout and mark connection lines on plywood
6) Attach plywood sheathing to exterior of posts.
7) Measure and cut two (2) top plywood sheets. Rip top edge at 60° angle as detailed.
8) Tack top piece of sheathing above bottom piece and ensure angle does not impede with roof slope.
9) Attach top sheathing. Make sure top sheet is tight against the bottom sheet and all angles are flush.
10) Repeat steps for opposing side with second sheets of sheathing.



Exterior Sheathing

Scale 1:500

Notes:
1) These drawings are intended as a construction guide.
2)Materials, veneers, connections, hinges, etc are determined by the builder. It is the responsibility of the builder to verify dimensions.
3) Always measure dimensions carefully and label each piece individually.
4) Number of pieces are marked below each detail.

Material List

Description	Dimensions mm	Dimensions english	Quantity
Bottom Sheathing	1200x2400x19	4'x8'x¾"	2
Top Sheathing	1200x2400x19	4'x8'x¾"	1

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Title: Sheathing Details	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	3
Date: 19-Jan-2009	Scale: Specified		

Roof Rafter

Scale 1:500

INSTRUCTIONS:

1) Measure and cut six (6) roof rafters as dimensioned.
2) Layout three (3) pairs of two (2) rafters each.
3) Attach rafters with 120° angle brackets for greater support.
4) Place roof rafter on top of support posts and connect with #30x120mm torque screws. Be sure posts are centered and overhangs are even on both sides.
5) Connect to interior support posts. Be sure to screw straight down into support posts. If desired, use 60° roof brackets for added strength.
6) Repeat steps 3-5 for remaining rafters.

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Material List

Description	Dimensions mm	Dimensions english	Quantity
Base Plate	45x80x1200	2x4x4'	4
Nesting Door Plate	45x80x600	2x4x2'	1
Nesting Header	45x80x600	2x4x2'	1
General Header	45x80x300	2x4x1'	4

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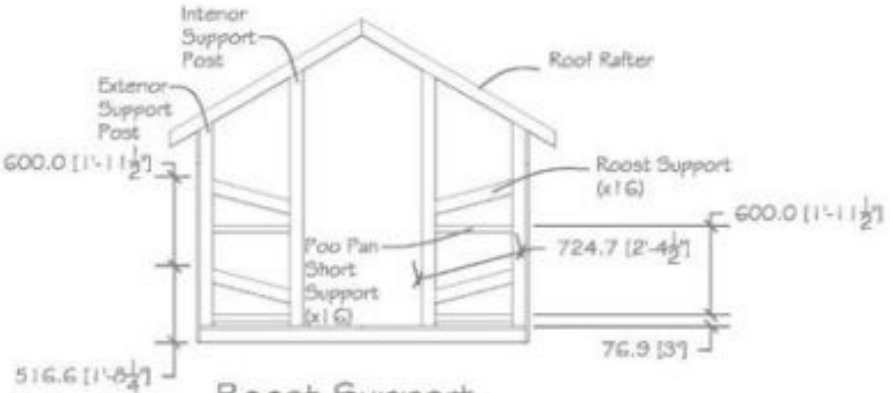
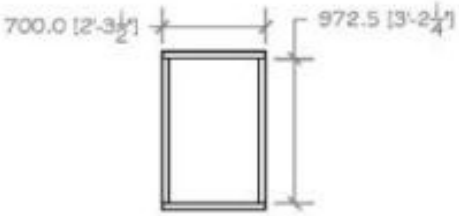
Title: Roof Rafter Details	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	4
Date: 19-Jan-2009	Scale: Specified		



Roost Support

Scale 1:500



Poo Pan Support

Scale 1:500

INSTRUCTIONS:

1) Measure and cut roost supports as detailed.
2) Measure and mark placement of roost supports on inside of exterior posts.
3) Clamp roost supports in place and attach to inside of exterior posts using #30x60-70mm torque screws.
4) Repeat steps 2 & 3 for remaining roost supports. Make sure roost supports are same distance vertically so roost planks are level.
5)Measure and cut poo pan support pieces (16 long and 16 short).
6) Frame poo pan supports as detailed with #30x40mm torque screws. Drill screw holes to prevent supports from cracking.
7) Repeat step 6 for seven (7) more poo pan supports (8 poo pan supports total).
8) Mark placement of poo pan supports on exterior and interior vertical support posts.
9) Attach poo pan supports to posts with #30x40mm torque screws. Make sure supports are level and attached tight to posts.
10) Place 25x25mm planks across roost supports. Measure and cut planks where needed. Attach to roost supports with #30x40mm torque screws.

Notes:

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Material List			
Description	Dimensions mm	English	Quantity
Roost Support	45x90x800	2x4x4'	16
Poo Pan Long Support	25x25x1200	1x1x4'	16
Poo Pan Short Support	25x25x800	1x1x4'	16
Roost Plank	25x25x2400	1x1x8'	20

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Phone: 406-626-4522

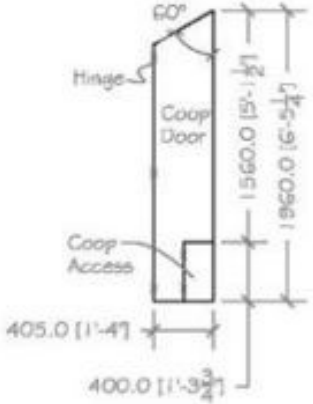
Title: Roost Support Roost Planks	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	5
Date: 19-Jan-2009	Scale:	Specified	

INSTRUCTIONS:

1) Measure and cut roof sheathing as detailed (2 sheets).
2) Mark ¢ of sheathing and tack into place on roof supports using #20-#30x40mm torque screws.
3) Repeat step 2 for other roof sheet.
4) Measure and cut 1200x2400x19mm plywood sheet to rough dimensions of two (2) doors and two (2) poo pan access doors.
5) Layout doors and cut angle of coop and poo pan access doors @ 60°
6) Layout and cut chicken access door out of coop doors. Keep the waste plate as the access door. Attach chicken access to door plate with two (2) hinges (by builder)
7) Lay out doors and screw hinges (by builder) to edge of doors. **Make sure doors will swing out!**
8) Place door against support posts and use spacers to hold door at right height and make sure door fits in opening. Tack hinges to support posts of first door and put second door in place to make sure both doors open and close easily and shut correctly.
9) Once both doors open and shut completely and easily, attach slide bolt (by builder) to both coop and chicken access doors to lock.
10) Attach poo pan access doors to interior support posts in same manner as coop doors. Make sure doors fit flush in openings and swing freely.
11) Attach slide bolt to poo access doors and exterior posts and lock.
12) Repeat steps 1-11 for opposing side of coop.

Roof Sheet Detail (x2)

Scale 1:500



Coop Door Details (x2)

Scale 1:500

Notes:

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Material List

Description	Dimensions mm	Dimensions english	Quantity
Roof Sheathing	1200x2400x19	4'x8'x3/4"	2
Coop Door & Coop Access	1200x2400x19	4'x8'x3/4"	1
Poo Pan Access Door	1200x2400x19	4'x8'x3/4"	1
Hinge and Slide Bolt	By Builder	By Builder	8

3D imensional concepts
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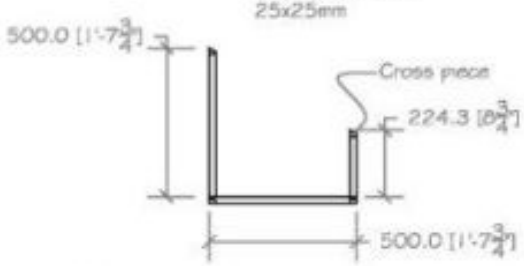
Phone: 406-626-4522

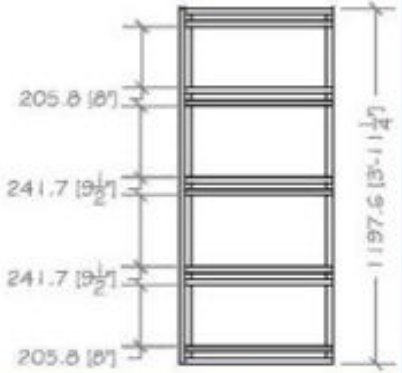
Title: Coop Doors and Roof Sheathing	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	6
Date: 19-Jan-2009	Scale: Specified		

Note: Nesting box frame pieces are 25x25mm



Nesting Box Frame (x18)

Scale 1:500



Notes:

1) These drawings are intended as a construction guide.
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4) Number of pieces are marked below each detail.

INSTRUCTIONS:

1) Measure and cut nesting box frame pieces.
2) Connect frame pieces with #30x40mm torque screws. Drill holes to prevent cracking pieces. Be sure to check for flush and level vertically on each piece.
3) Measure and cut nesting box sheathing.
4) Attach sheathing to frames with #20x30mm torque head screws.
5) Construct nesting boxes using angle brackets and attach frames to cross supports to make one (1) nesting box with four (4) compartments.
6) Measure and cut nesting box back wall.
7) Attach nesting box back wall across entire length and attach to cross pieces using #30x40mm torque screws.
8) Measure and cut nesting box floor.
9) Tip onto back wall and attach nesting box floor with #30x40mm torque screws (to prevent moisture intrusion apply moisture barrier before attaching to nesting box frame pieces.
10) Cut or drill holes in back wall for wall connector hooks (by builder). Make sure holes clear the top cross supports and will not interfere with hanging nesting box.
11) Measure and cut nesting box roof.
12) Attach nesting box roof hinges (by builder). Make sure roof opens up
13) Measure and lay out hooks for nesting box. If possible, bolt hook to sheathing rather than screw.
14) Hang completed nesting box on hooks and make sure nesting box stays in place, fits correctly and removes easily.

NOTE: If you do NOT require the front panel to be removable, attach the front panel to the nesting box permanently with #20x40mm torque screws. If you do require the front panel to be removed, continue with these instructions.

15) Cut 25x25mm panel track.
16) Measure and cut removable front wall .
17) Tack front wall against nesting boxes and layout panel track.
18) Attach front removable panel track to nesting box floor sheet. Make sure panel slides easily but is tight enough to hold itself against nesting box.

"We recommend installing a hook eye latch on both sides of the panel to lock it into place when not used."

Material List

Description	Dimensions mm	Dimensions english	Quantity
Nesting Box Frame	25x25x1500	1x1x5'	18
Nesting Box Cross Piece	45x90x300	2x4x2'	48
Nesting Box Back Wall	1200x2400x19	2x4x2'	2
Nesting Box Floor	1200x2400x19	4'x4'x3/4"	2
Nesting Box Front Panel	1200x2400x19	4'x4'x3/4"	2
Nesting Box Floor	1200x2400x19	4'x4'x3/4"	2
Nesting Box Panel Track	25x25x1200	1x1x5'	2

3D Dimensional concepts
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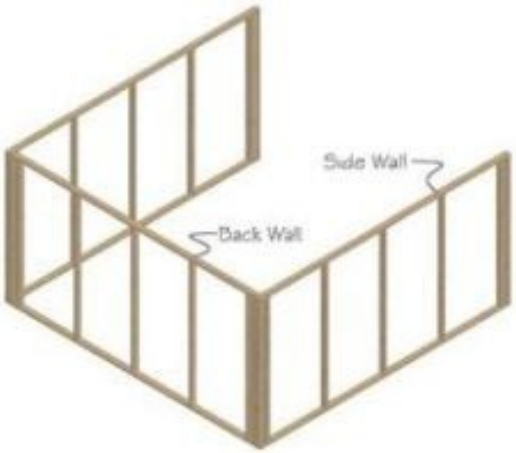
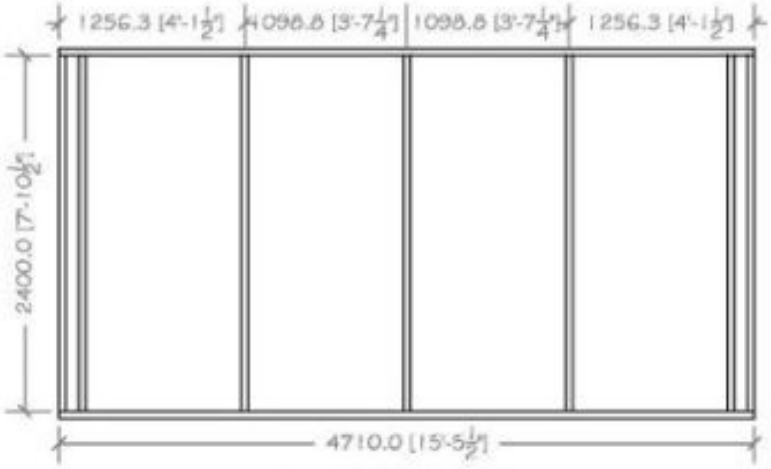
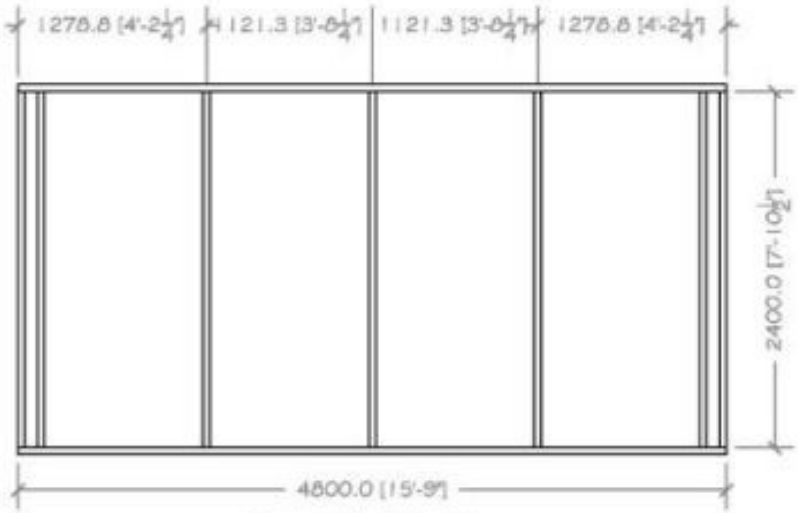
Title: Nesting Box Details	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	7
Date: 19-Jan-2009	Scale: Specified		





Back Wall (x1)

Scale 1:1000



Side Wall (x2)

Scale 1:1000

Notes:

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Material List

Description	Dimensions mm	Dimensions imperial	Quantity
Base Plate	45x90x4800	2x4x16'	2
Top Plate	45x90x4800	2x4x16'	2
Vertical Support	45x90x2400	2x4x8'	18

3Dimensional concepts
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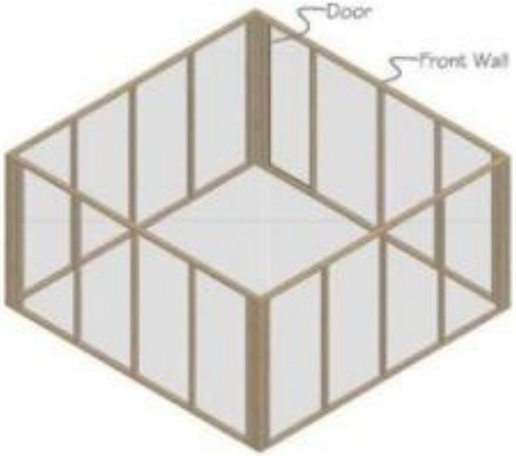
Phone: 406-626-4522

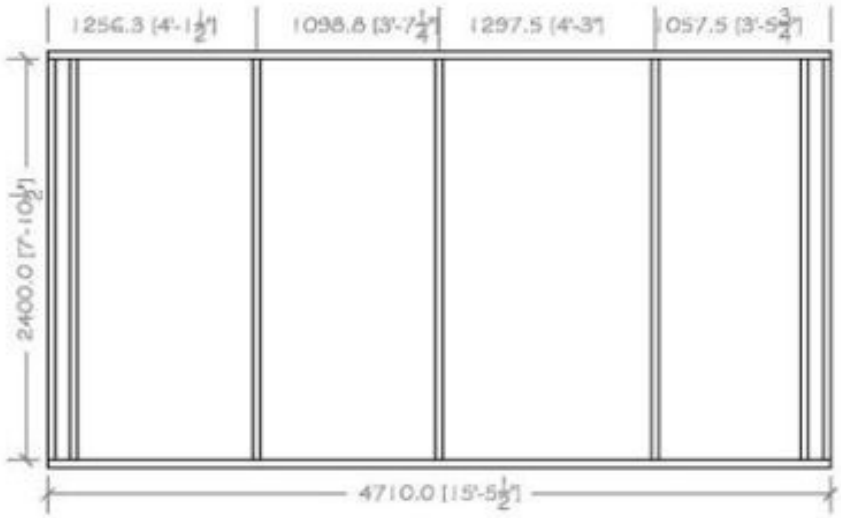
Title: Coop Details
Side and Back Wall
Drawn: JSG
Approved:
Revision: 0
Drawing: 1
Date: 19-Jan-2009
Scale: Specified



INSTRUCTIONS:
1) Measure and layout boards at detailed.
2) Screw or nail vertical supports to top and bottom plates.
3) Screw or nail front wall to side walls. Make sure to square edges.
4) Attach mesh over top of walls and drape over sides. Tighten and attach from the top down. Be sure to pull mesh tight.
5) Measure and cut pieces for door.
6) Nail or screw pieces together. Make sure door frame is square and fits in door frame.
7) Attach latch and hinges (by builder).

Note: Door frame constructed of 25x25mm

Coop Door (x1)
Scale 1:1000



Front Wall (x1)
Scale 1:1000

Notes:
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Material List

Description	Dimensions mm	English	Quantity
Base Plate	45x80x4800	2x4x16'	1
Top Plate	45x80x4800	2x4x16'	1
Vertical Support	45x90x2400	2x4x8'	9
Door Frame	25x25x6600	1x1x22'	4

3Dimensional concepts
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Cell: 406-546-6672
Phone: 406-626-4522

Title: Coop Details Front Wall & Door	Drawn: JSG	Approved:	
	Revision: 0	Drawing:	2
Date: 19-Jan-2009	Scale: Specified		

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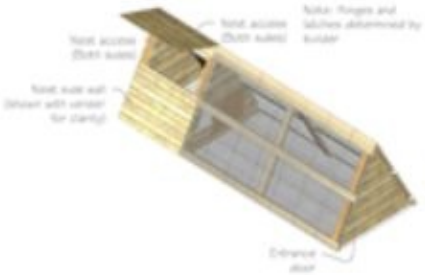

chicken coop 4

Chicken coop 5

Chicken coop 6

Chicken coop 10

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Step 2

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Step 3

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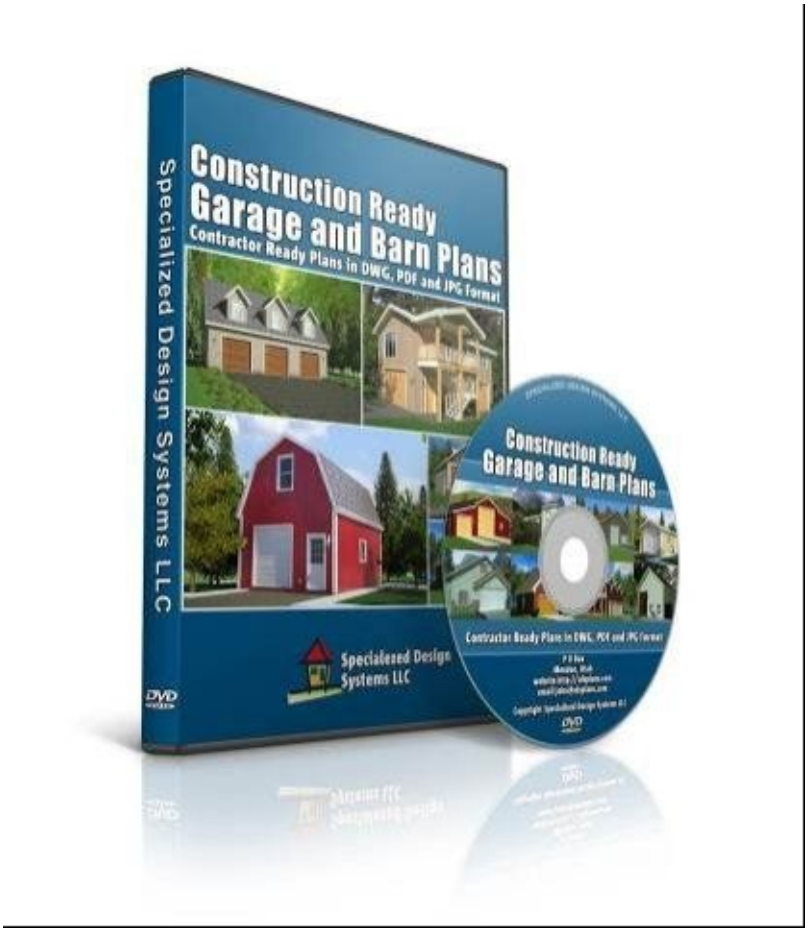

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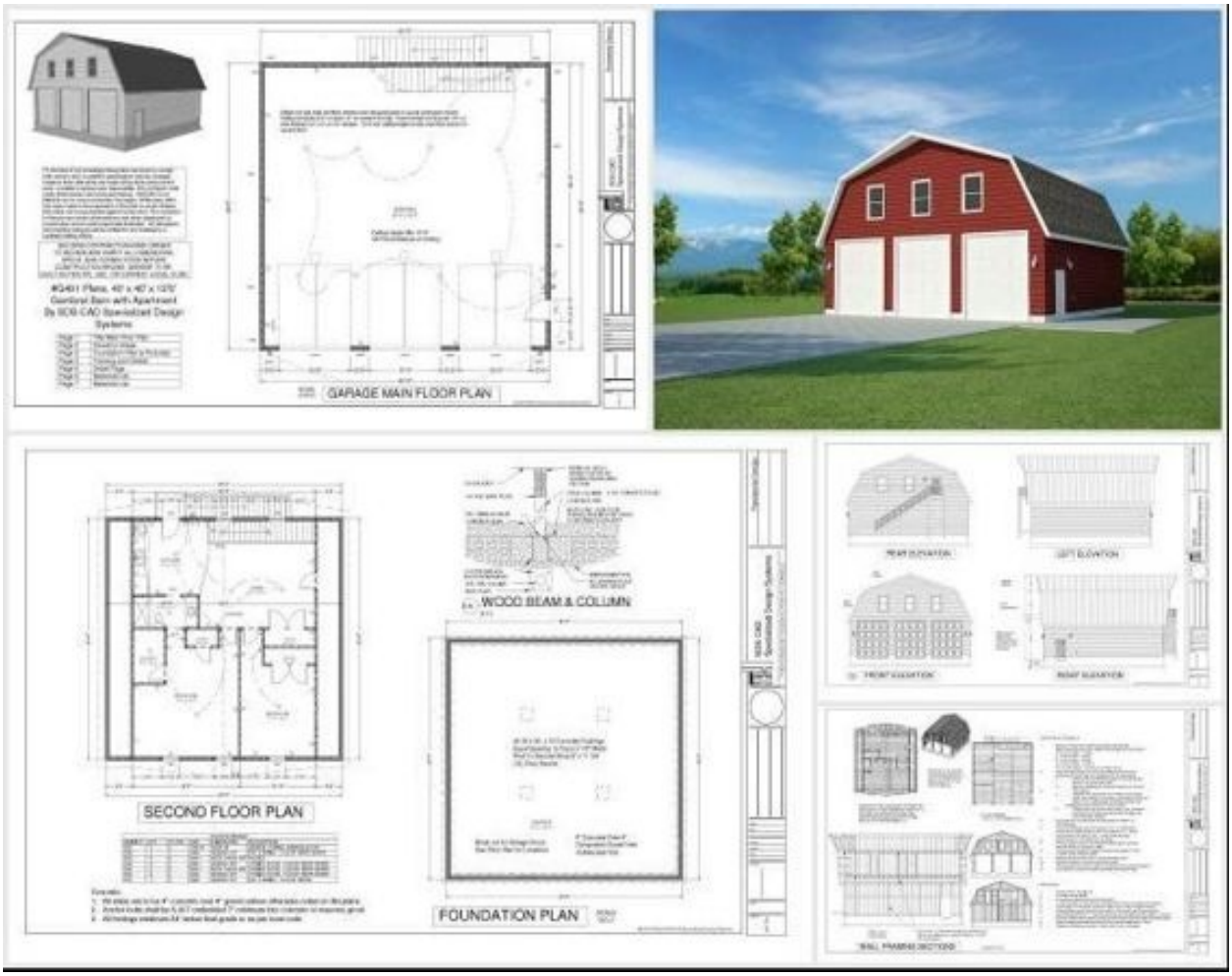
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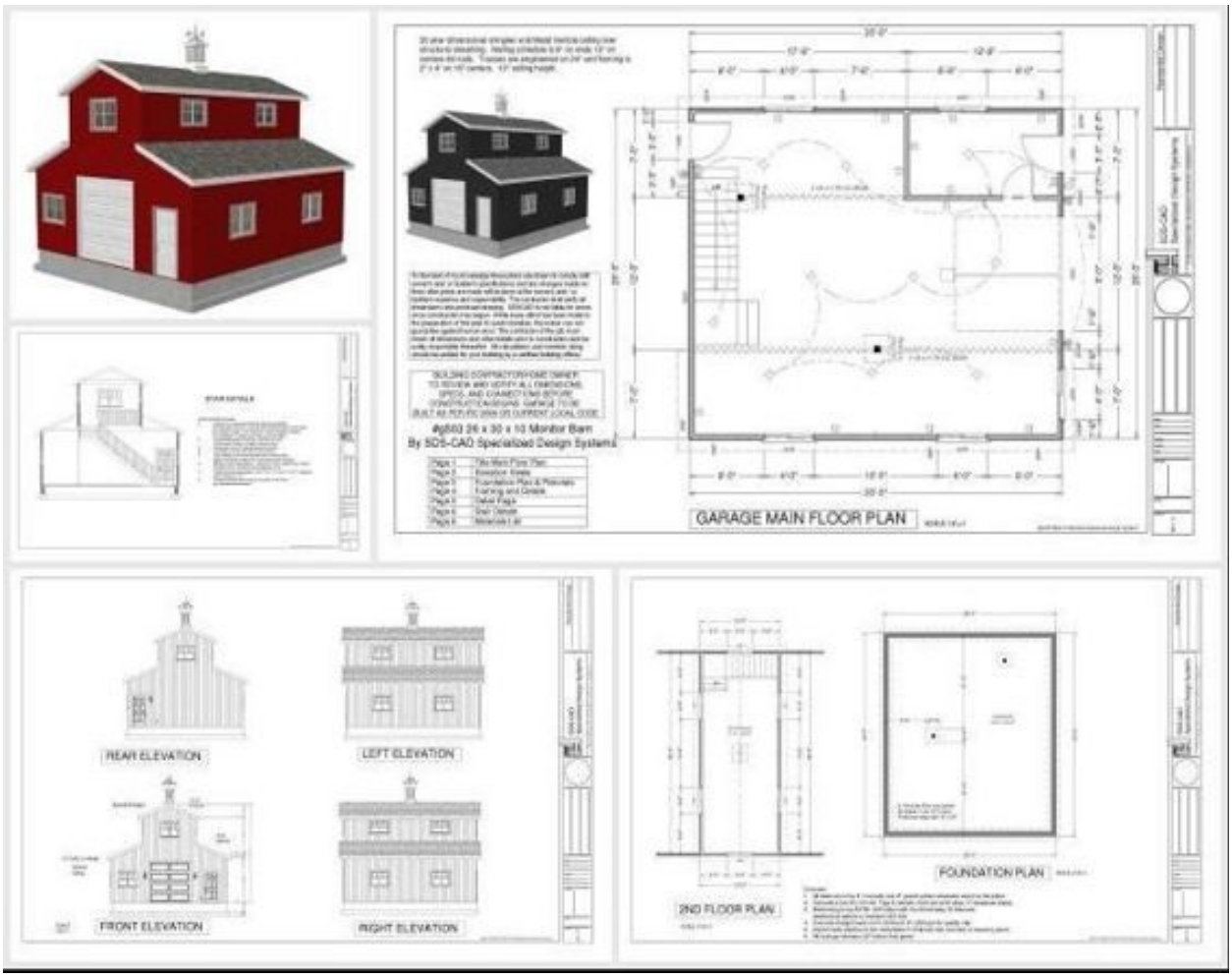
WOOD BEAM & COLUMN
SECOND FLOOR PLAN
FOUNDATION PLAN


Ag560 26 x 30 x 10 Monitor Barn
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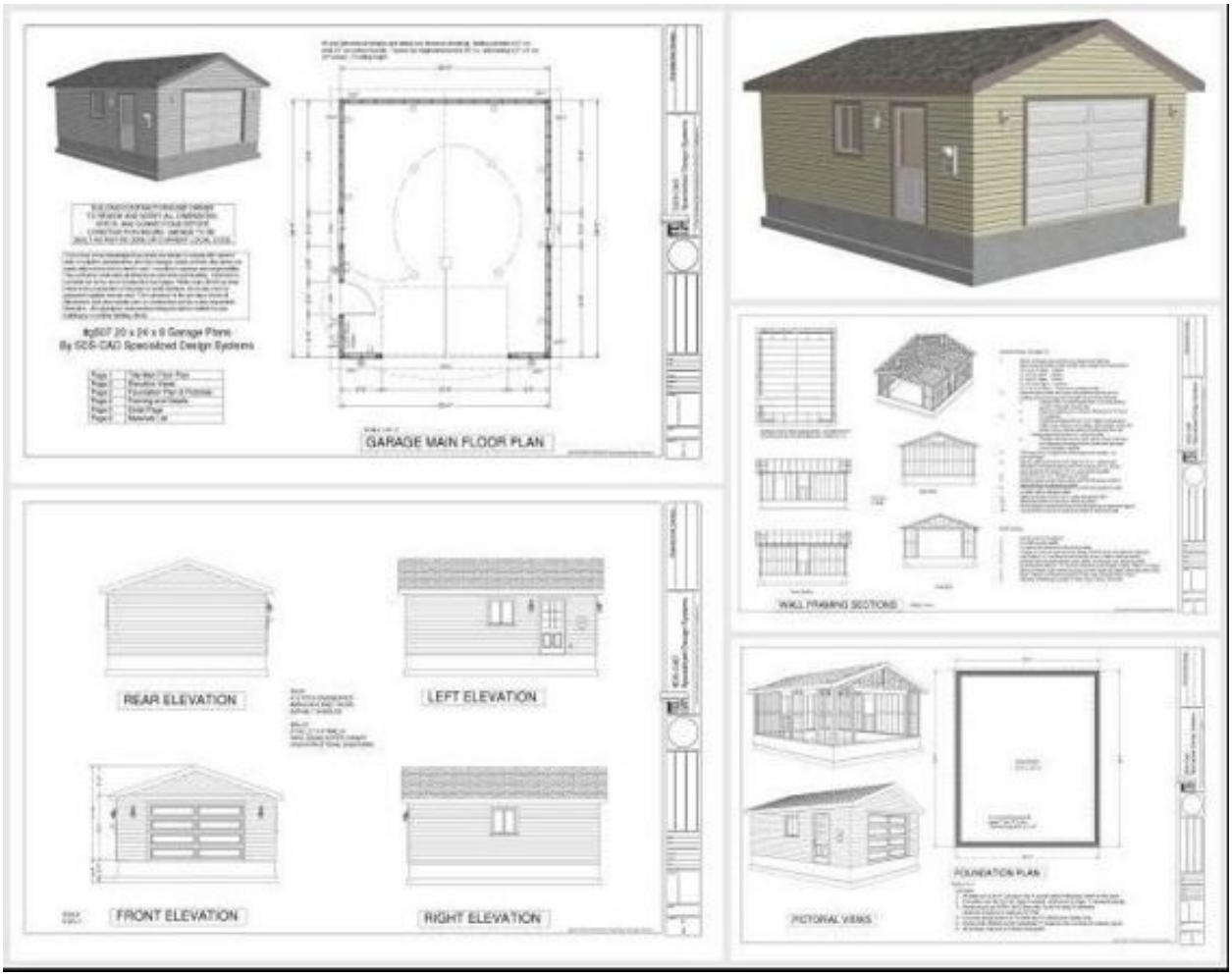
FOUNDATION PLAN
2ND FLOOR PLAN


GARAGE MAIN FLOOR PLAN
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WALL FRAMING SECTIONS
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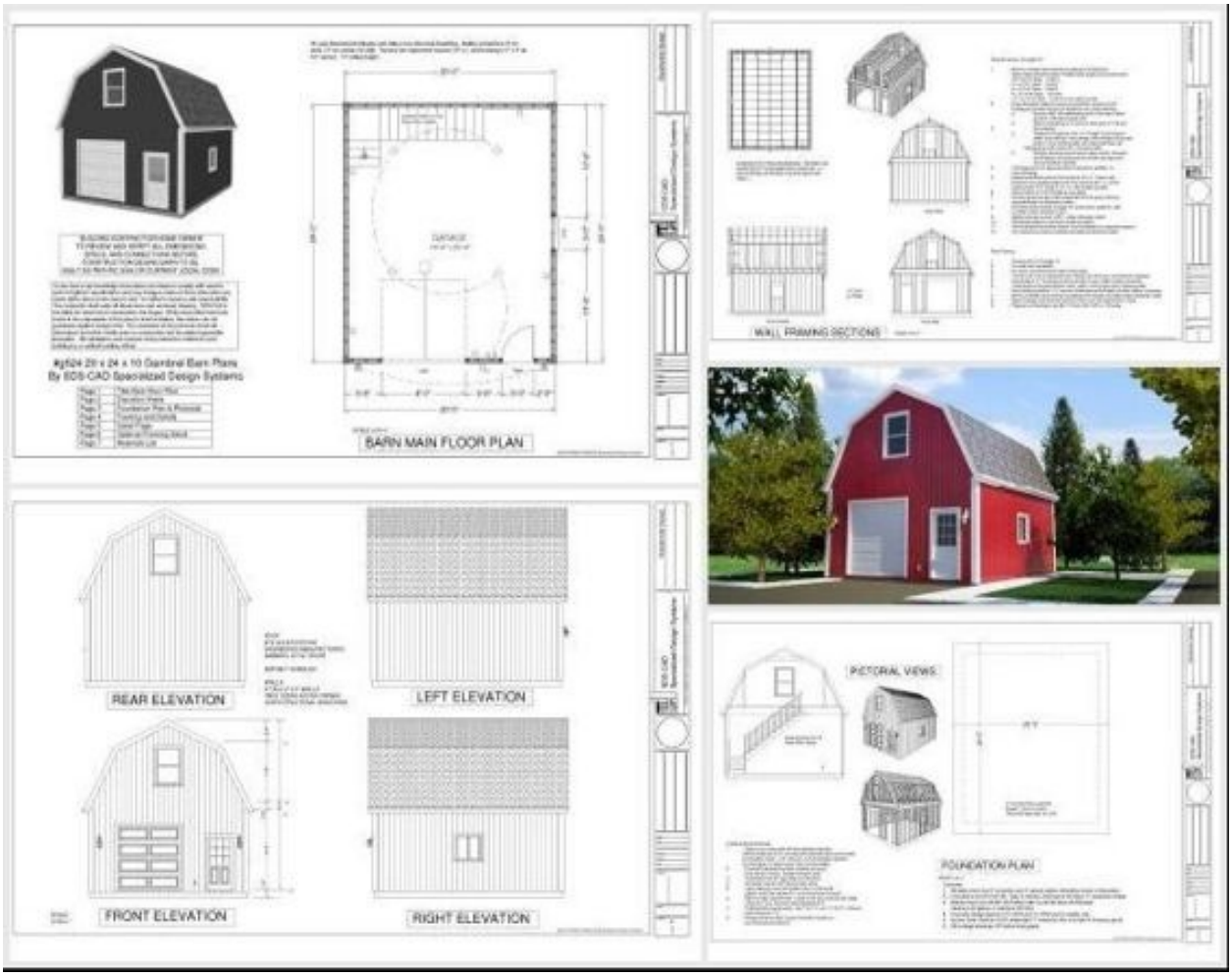
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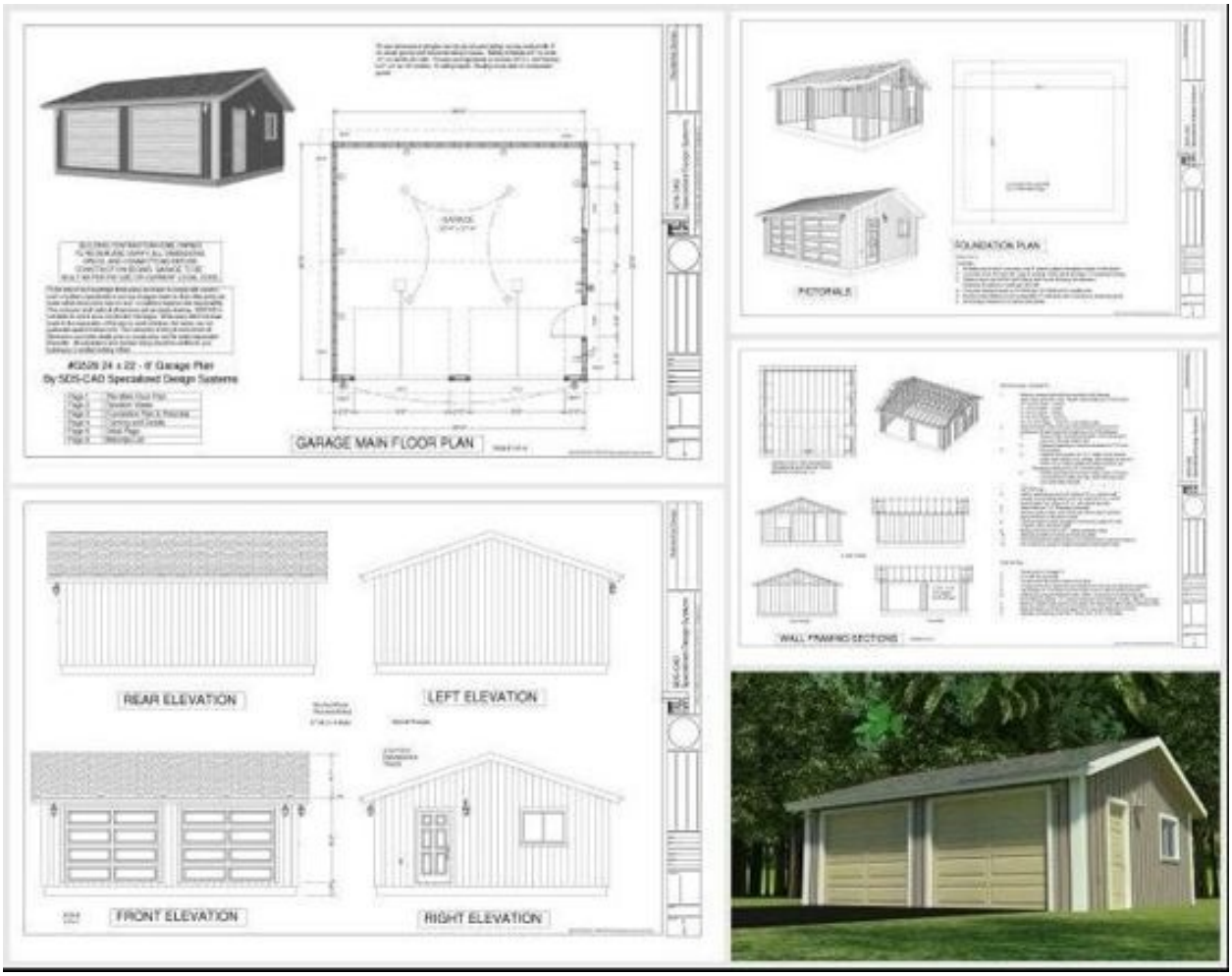
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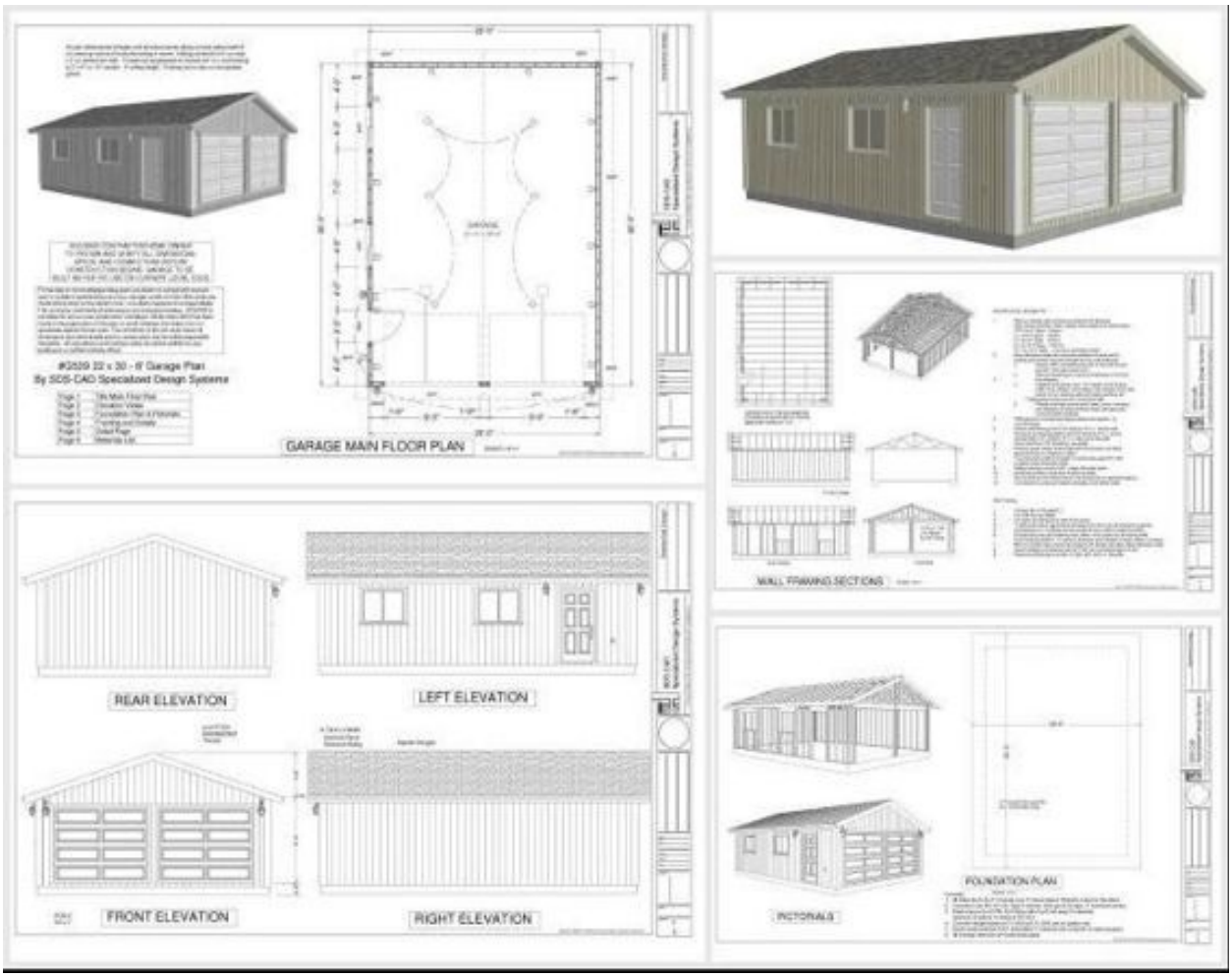
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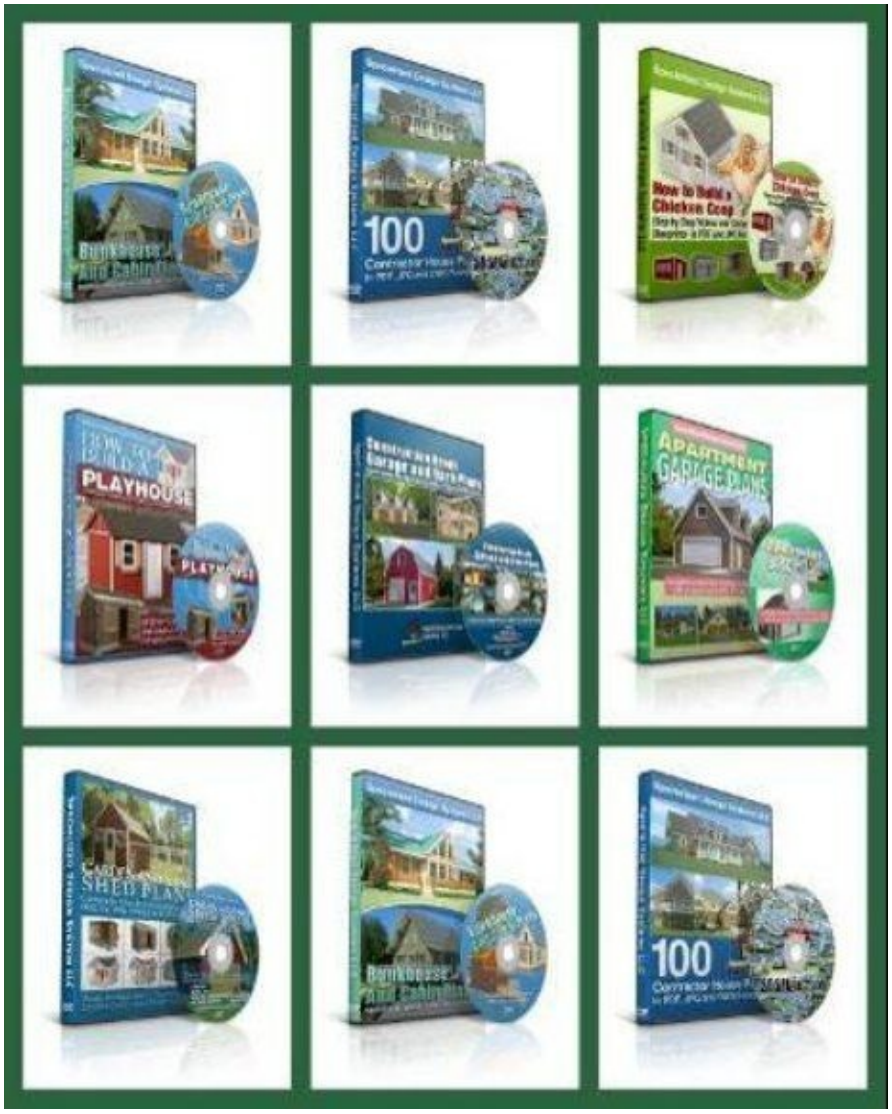

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Bonus Plans 12’ X 16’ Chicken Coop Pole Barn Option
Complete high resolution plans are available later in the book for downloading and printing.
We made just a small door to enter the run. We made it so that it could be closed at night if we had any predator problems.
12’ X 16’ Chicken Coop Pole Barn Option
12’ x 16’ Chicken Coop Plans Framed Version
Plans 12 x 20 Gambrel Shed Plans
12 x 14 Playhouse Shed Chicken Coop
Portable Chicken Coop Plans
Videos on how to build this portable chicken coop
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